BOSS®

JS-5 JamStation

BACKING MACHINE WITH AUDIO TRACK

Owner's Manual

Thank you, and congratulations on your choice of the BOSS JS-5 JamStation.

Before using this unit, carefully read the sections entitled:

- **USING THE UNIT SAFELY (page 2–3)**
- **IMPORTANT NOTES (page 10–11)**

These sections provide important information concerning the proper operation of the unit.

Additionally, in order to feel assured that you have gained a good grasp of every feature provided by your new unit, Owner's manual should be read in its entirety. The manual should be saved and kept on hand as a convenient reference.

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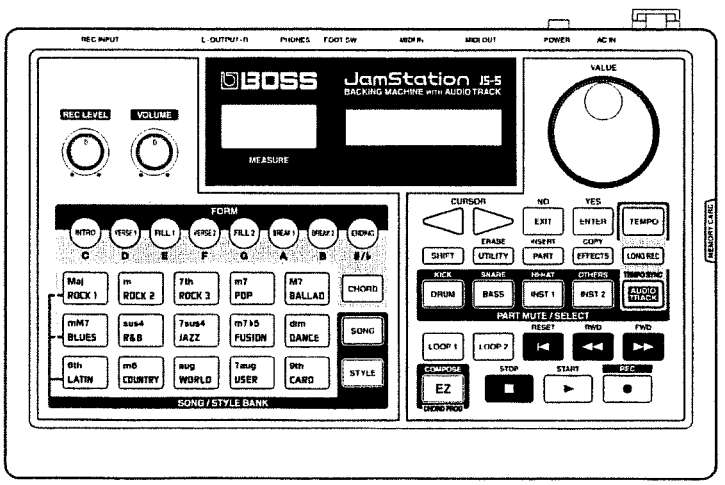

USING THE UNIT SAFELY

INSTRUCTIONS FOR THE PREVENTION OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS

About ⚠WARNING and ⚠CAUTION Notices

⚠WARNING	Used for instructions intended to alert the user to the risk of death or severe injury should the unit be used improperly.
⚠CAUTION	Used for instructions intended to alert the user to the risk of injury or material damage should the unit be used improperly. * Material damage refers to damage or other adverse effects caused with respect to the home and all its furnishings, as well to domestic animals or pets.

About the Symbols

⚠	The △ symbol alerts the user to important instructions or warnings.The specific meaning of the symbol is determined by the design contained within the triangle. In the case of the symbol at left, it is used for general cautions, warnings, or alerts to danger.
⃠	The ⃠ symbol alerts the user to items that must never be carried out (are forbidden). The specific thing that must not be done is indicated by the design contained within the circle. In the case of the symbol at left, it means that the unit must never be disassembled.
⏻	The ● symbol alerts the user to things that must be carried out. The specific thing that must be done is indicated by the design contained within the circle. In the case of the symbol at left, it means that the power-cord plug must be unplugged from the outlet.

ALWAYS OBSERVE THE FOLLOWING

⚠WARNING

- Before using this unit, make sure to read the instructions below, and the Owner's Manual.

- Do not open (or modify in any way) the unit or its AC adaptor.

- Do not attempt to repair the unit, or replace parts within it (except when this manual provides specific instructions directing you to do so). Refer all servicing to your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page.

- Never use or store the unit in places that are:
  - Subject to temperature extremes (e.g., direct sunlight in an enclosed vehicle, near a heating duct, on top of heat-generating equipment); or are
  - Damp (e.g., baths, washrooms, on wet floors); or are
  - Humid; or are
  - Exposed to rain; or are
  - Dusty; or are
  - Subject to high levels of vibration.

- Make sure you always have the unit placed so it is level and sure to remain stable. Never place it on stands that could wobble, or on inclined surfaces.

- Be sure to use only the AC adaptor supplied with the unit. Also, make sure the line voltage at the installation matches the input voltage specified on the AC adaptor's body. Other AC adaptors may use a different polarity, or be designed for a different voltage, so their use could result in damage, malfunction, or electric shock.

⚠WARNING

- Do not excessively twist or bend the power cord, nor place heavy objects on it. Doing so can damage the cord, producing severed elements and short circuits. Damaged cords are fire and shock hazards!

- This unit, either alone or in combination with an amplifier and headphones or speakers, may be capable of producing sound levels that could cause permanent hearing loss. Do not operate for a long period of time at a high volume level, or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should immediately stop using the unit, and consult an audiologist.

- Do not allow any objects (e.g., flammable material, coins, pins); or liquids of any kind (water, soft drinks, etc.) to penetrate the unit.

- Immediately turn the power off, remove the AC adaptor from the outlet, and request servicing by your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page when:
  - The AC adaptor, the power-supply cord, or the plug has been damaged; or
  - Objects have fallen into, or liquid has been spilled onto the unit; or
  - The unit has been exposed to rain (or otherwise has become wet); or
  - The unit does not appear to operate normally or exhibits a marked change in performance.

⚠WARNING

- In households with small children, an adult should provide supervision until the child is capable of following all the rules essential for the safe operation of the unit.

- Protect the unit from strong impact. (Do not drop it!)

- Do not force the unit's power-supply cord to share an outlet with an unreasonable number of other devices. Be especially careful when using extension cords—the total power used by all devices you have connected to the extension cord's outlet must never exceed the power rating (watts/amperes) for the extension cord. Excessive loads can cause the insulation on the cord to heat up and eventually melt through.

- Before using the unit in a foreign country, consult with your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page.

⚠CAUTION

- The unit and the AC adaptor should be located so their location or position does not interfere with their proper ventilation.

- Always grasp only the plug on the AC adaptor cord when plugging into, or unplugging from, an outlet or this unit.

- Whenever the unit is to remain unused for an extended period of time, disconnect the AC adaptor.

- Try to prevent cords and cables from becoming entangled. Also, all cords and cables should be placed so they are out of the reach of children.

- Never climb on top of, nor place heavy objects on the unit.

- Never handle the AC adaptor or its plugs with wet hands when plugging into, or unplugging from, an outlet or this unit.

- Before moving the unit, disconnect the AC adaptor and all cords coming from external devices.

- Before cleaning the unit, turn off the power and unplug the AC adaptor from the outlet.

- Whenever you suspect the possibility of lightning in your area, disconnect the AC adaptor from the outlet.

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Main Features

The JS-5 is a backing machine equipped with a backing generator offering new features that make it easy to create four-part backing data (accompaniment data), even for people with no knowledge of sequencers or music.

It's also equipped with a digital recorder feature, so you can record guitar solos and vocals.

This means you can complete an entire song using nothing other than the JS-5.

Backing Generator

High-quality four-part backing data is created by selecting and combining preset songs and styles according to the desired use.

200 Preset Songs

Some 200 songs are provided in a wide variety of genres, including rock and jazz. You can start practicing guitar right away, just by choosing a song. You can also copy preset songs for use when creating your own original songs.

It's also possible to mute out an accompaniment part for use as a rhythm machine with bass.

Button Input for 15 Types of Chords

This supports even complex chords, and lets you enter chord progressions just as they are written.

Creating User Songs

You can compose songs (User Songs) by specifying a Style and recording the Form and Chord Progression. You can save maximum 100 User Songs in the unit. If you use a memory card (SmartMedia), you can save up to maximum 100 songs on the card.

EZ Compose Function

This interactive feature lets you complete song data simply and easily, making only a minimum of settings.

Digital Recorder Function

You can record about two minutes of guitar play, vocals, or other sounds. You can also use a memory card (SmartMedia). For instance, with 64-megabyte (MB) smart media, it's possible to record about 68 minutes.

Time stretching is performed automatically for recording data, depending on the backing tempo, to synchronize it with the backing.

Loop Function

You can set a loop point for each individual song. This setting enables recording or loop play within a particular passage.

Control Using Foot Switches

If you connect a foot switch (sold separately), you can use the foot switch to start and stop play, or to switch forms.

Playing in Sync with MIDI Instruments

The unit is compatible with MIDI Song Position Pointer, so you can play in sync with a MIDI instrument, such as the BR-8 or a sequencer.

* *SmartMedia is a trademark of Toshiba Corporation.*

IMPORTANT NOTES

In addition to the items listed under "USING THE UNIT SAFELY" on page 2–3, please read and observe the following:

Power Supply

- Do not use this unit on the same power circuit with any device that will generate line noise (such as an electric motor or variable lighting system).
- The AC adaptor will begin to generate heat after long hours of consecutive use. This is normal, and is not a cause for concern.
- Before connecting this unit to other devices, turn off the power to all units. This will help prevent malfunctions and/or damage to speakers or other devices.

Placement

- Using the unit near power amplifiers (or other equipment containing large power transformers) may induce hum. To alleviate the problem, change the orientation of this unit; or move it farther away from the source of interference.
- This device may interfere with radio and television reception. Do not use this device in the vicinity of such receivers.
- Do not expose the unit to direct sunlight, place it near devices that radiate heat, leave it inside an enclosed vehicle, or otherwise subject it to temperature extremes. Excessive heat can deform or discolor the unit.
- To avoid possible breakdown, do not use the unit in a wet area, such as an area exposed to rain or other moisture.

Maintenance

- For everyday cleaning wipe the unit with a soft, dry cloth or one that has been slightly dampened with water. To remove stubborn dirt, use a cloth impregnated with a mild, non-abrasive detergent. Afterwards, be sure to wipe the unit thoroughly with a soft, dry cloth.
- Never use benzine, thinners, alcohol or solvents of any kind, to avoid the possibility of discoloration and/or deformation.

Repairs and Data

- Please be aware that all data contained in the unit's memory may be lost when the unit is sent for repairs. Important data should always be backed up on a Memory card (SmartMedia), or written down on paper (when possible). During repairs, due care is taken to avoid the loss of data. However, in certain cases (such as when circuitry related to memory itself is out of order), we regret that it may not be possible to restore the data, and Roland assumes no liability concerning such loss of data.

Memory Backup

- This unit contains a battery which powers the unit's memory circuits while the main power is off. When this battery becomes weak, the message shown below will appear in the display. Once you see this message, have the battery replaced with a fresh one as soon as possible to avoid the loss of all data in memory. To have the battery replaced, consult with your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" sheet.

  "Battery Low !"

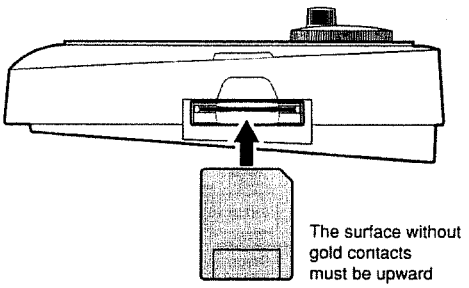
Additional Precautions

- Please be aware that the contents of memory can be irretrievably lost as a result of a malfunction, or the improper operation of the unit. To protect yourself against the risk of loosing important data, we recommend that you periodically save a backup copy of important data you have stored in the unit's memory on a Memory card (SmartMedia).
- Unfortunately, it may be impossible to restore the contents of data that was stored Memory card (SmartMedia) once it has been lost. Roland Corporation assumes no liability concerning such loss of data.
- Use a reasonable amount of care when using the unit's buttons, sliders, or other controls; and when using its jacks and connectors. Rough handling can lead to malfunctions.
- Never strike or apply strong pressure to the display.
- When connecting / disconnecting all cables, grasp the connector itself—never pull on the cable. This way you will avoid causing shorts, or damage to the cable's internal elements.
- To avoid disturbing your neighbors, try to keep the unit's volume at reasonable levels. You may prefer to use headphones, so you do not need to be concerned about those around you (especially when it is late at night).
- When you need to transport the unit, package it in the box (including padding) that it came in, if possible. Otherwise, you will need to use equivalent packaging materials.
- Use a cable from Roland to make the connection. If using some other make of connection cable, please note the following precautions.
  - Some connection cables contain resistors. Do not use cables that incorporate resistors for connecting to this unit. The use of such cables can cause the sound level to be extremely low, or impossible to hear. For information on cable specifications, contact the manufacturer of the cable.

Before Using Memory Cards

Using Memory Cards

- Carefully insert the memory card all the way in—until it is firmly in place.



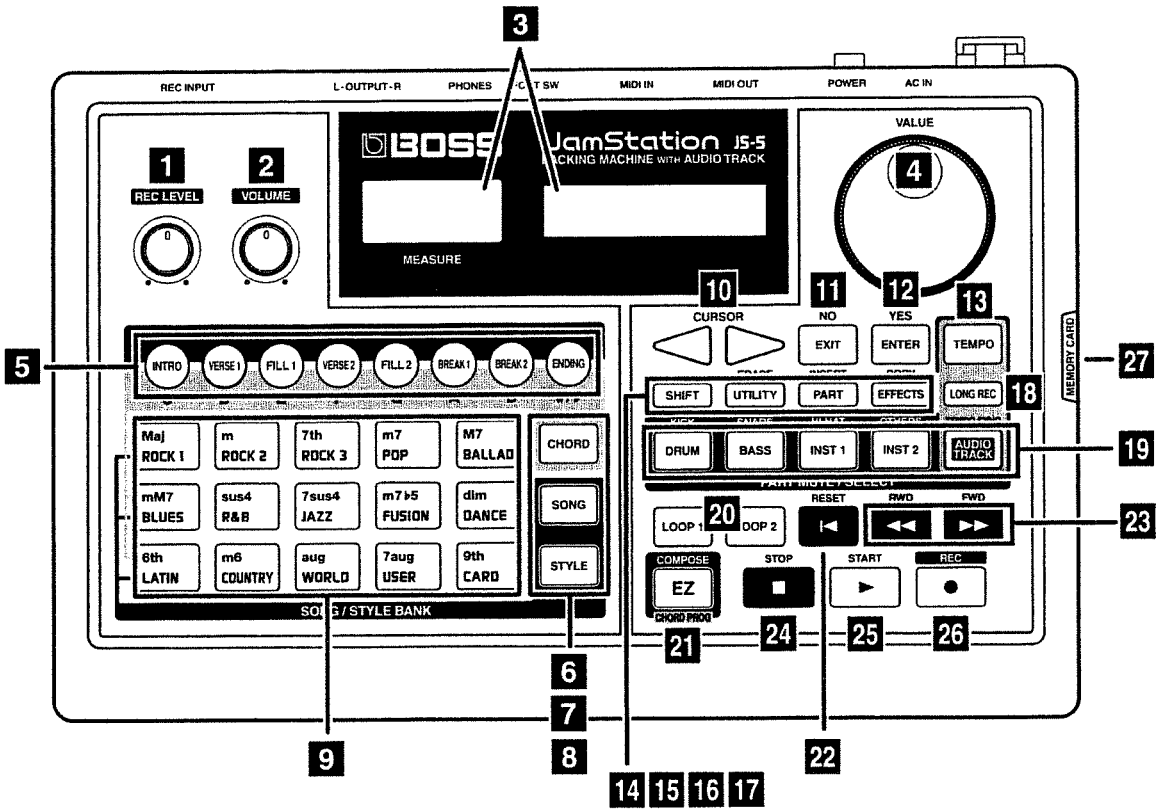
- Never touch the terminals of the memory card. Also, avoid getting the terminals dirty.

Copyright

- Unauthorized recording, distribution, sale, lending, public performance, broadcasting, or the like, in whole or in part, of a work (musical composition, video, broadcast, public performance, or the like) whose copyright is held by a third party is prohibited by law.
- Do not use this unit for purposes that could infringe on a copyright held by a third party. BOSS/Roland assumes no responsibility whatsoever with regard to any infringements of third-party copyrights arising through your use of this unit.

Part Names and Functions

Front Panel



1. REC LEVEL Knob

This adjusts the input sound of a device connected to the REC INPUT jack.

2. VOLUME Knob

This adjusts the overall volume level of the JS-5.

3. Display

Left side: This displays the measure and count-in.

Right side: This displays a variety of information according to the state of the operation.

NOTE

If the left display shows " ☐ ," be very sure not to switch off the power or pull out a memory card (SmartMedia).

4. VALUE Dial

This changes the setting values for parameters. Holding down the SHIFT button while turning the dial makes the values change in larger increments.

5. FORM Buttons

These select a Form for playing or recording from among the eight types of Forms (performance patterns) ranging from Intro to Ending.

When the CHORD button is lit up, this selects the root of the chord.

6. CHORD Button

Press this to make chord-related settings, such as chord entry or chord-progression display.

7. SONG Button

Use this to make song-related settings, such as song selection and recording.

8. STYLE Button

Use this to make style-related settings, such as style selection and recording.

9. SONG/STYLE BANK (Song Bank/Style Bank) Buttons

SONG button illuminated:
These select a song category (ROCK 1 through CARD).

STYLE button illuminated:
These select a style category (ROCK 1 through CARD).

CHORD button illuminated:
These select a chord type (Maj through 9th).

10.CURSOR Buttons

These are used to select parameters and change screens (pages).

* *If you continue holding the button, the change will be continuous.*
* *If you hold down one button and press the other button, the change will become more rapid.*

11.EXIT Button

Press this to stop an operation.

12.ENTER Button

Use this to "lock in" a value you've set or to execute an operation.

13.TEMPO Button

Use this to adjust the tempo.

14.SHIFT Button

This is used in combination with other buttons.

15.UTILITY Button

Use this when making settings related to the usage environment for the JS-5.

ERASE Button:

Holding down the SHIFT button and pressing the UTILITY button makes this function as the ERASE button, allowing you to erase or delete data.

16.PART Button

Use this to make part-related settings.

INSERT Button:

Holding down the SHIFT button and pressing the PART button makes this function as the INSERT button, allowing you to insert data.

17.EFFECTS Button

Use this when making settings for reverb, chorus, or insert effect.

COPY Button:

Holding down the SHIFT button and pressing the EFFECTS button makes this function as the COPY button, allowing you to copy data.

18.LONG REC (Long Recording) Button

When you're recording your own performance, this switches you between high-quality recording and longer-time recording.

19.PART MUTE/SELECT Button

This mutes out (silences) a part when playing a song. When making the settings for a part, select the target part.

20.LOOP 1 and 2 Buttons

Use these for loop play.

21.EZ (EZ Compose) Button

Use this when using the EZ Compose feature. This button is also used when changing the chord progression temporarily during performance of a song.

22.RESET Button

When you have stopped play partway through a song, this returns you to the beginning of the song.

23.RWD (Rewind) and FWD (Forward) Buttons

RWD: Each press of this button moves the play position of the song back one measure.

FWD: Each press of this button moves the play position of the song ahead one measure.

* *If you continue holding the button, the change will be continuous.*
* *If you hold down one button and press the other button, the change will become more rapid.*

24.STOP Button

This stops performance.

25.START Button

This starts performance.

26.REC (Record) Button

This puts the JS-5 in a state where recording is possible.

Side Panel

27.MEMORY CARD Slot

This is for inserting a memory card (smart media).

MEMO

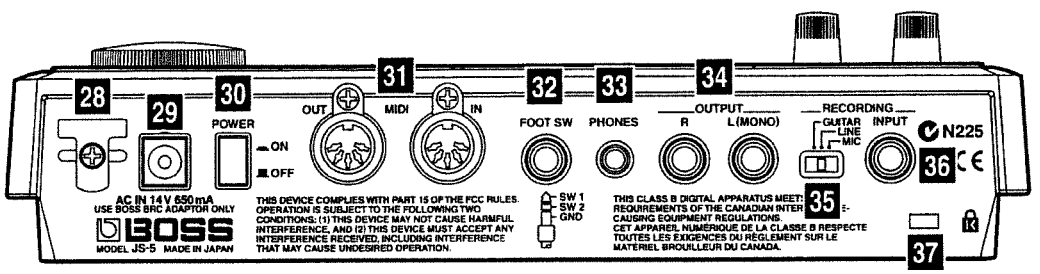
Purchase smartmedia at your local computer dealer or digital camera vendor.

NOTE

The JS-5 can use 8 to 64 MB SmartMedia with a power-source voltage of 3.3 V.
Inserting SmartMedia other than those described here may result in corruption of data in the JS-5. Be sure never to use anything other than the specified media.

* ***Roland S2M-5/S4M-5 SmartMedia cannot be used.***

Rear Panel



28.Cord Hook

This is for fastening the cord from the supplied AC adapter. This can help prevent power loss due to the plug being pulled out, or excessive force being applied to the AC adapter jack if the cord is accidentally yanked.

29.AC Adapter Jack

This is for connecting the included AC adapter (BRC series).

30.POWER Switch

This switches the power on and off.

31.MIDI IN and OUT Connectors

These are for connecting external MIDI instruments. Use MIDI cables (sold separately) to make the connections.

32.FOOT SW (Foot Switch) Jack

This is for connecting a foot switch such as the FS-5U (sold separately). By using the PCS-31 connection cord sold separately, you can connect and use two foot switches.

33.PHONES (Headphones) Jack

This is for connecting headphones.

34.OUTPUT Jacks R and L (MONO)

These are output jacks for audio signals. They are used to connect an amplifier, audio set, or the like.

Use an audio cable (sold separately) to make the connection.

35.REC INPUT Selector Switch

This makes the input sound of a device connected to the REC INPUT jack compatible with the JS-5.

36.REC INPUT Jack

This is for connecting an instrument you play yourself, such as an electric guitar or microphone.

37.MicroSaver Security Slot ( )

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Some Conventions This Manual Uses

This manual uses the typographical conventions shown below in order to explain methods of operation in a concise way.

- **Text enclosed in "[ ]" indicates buttons, knobs, and other controls on the panel.**

  [SONG]: Song button
  [VOLUME]: Volume knob
  [VALUE]: Value dial

- **[SHIFT] + [***] means "while holding down the Shift button, press the *** button."**

Getting Ready to Play

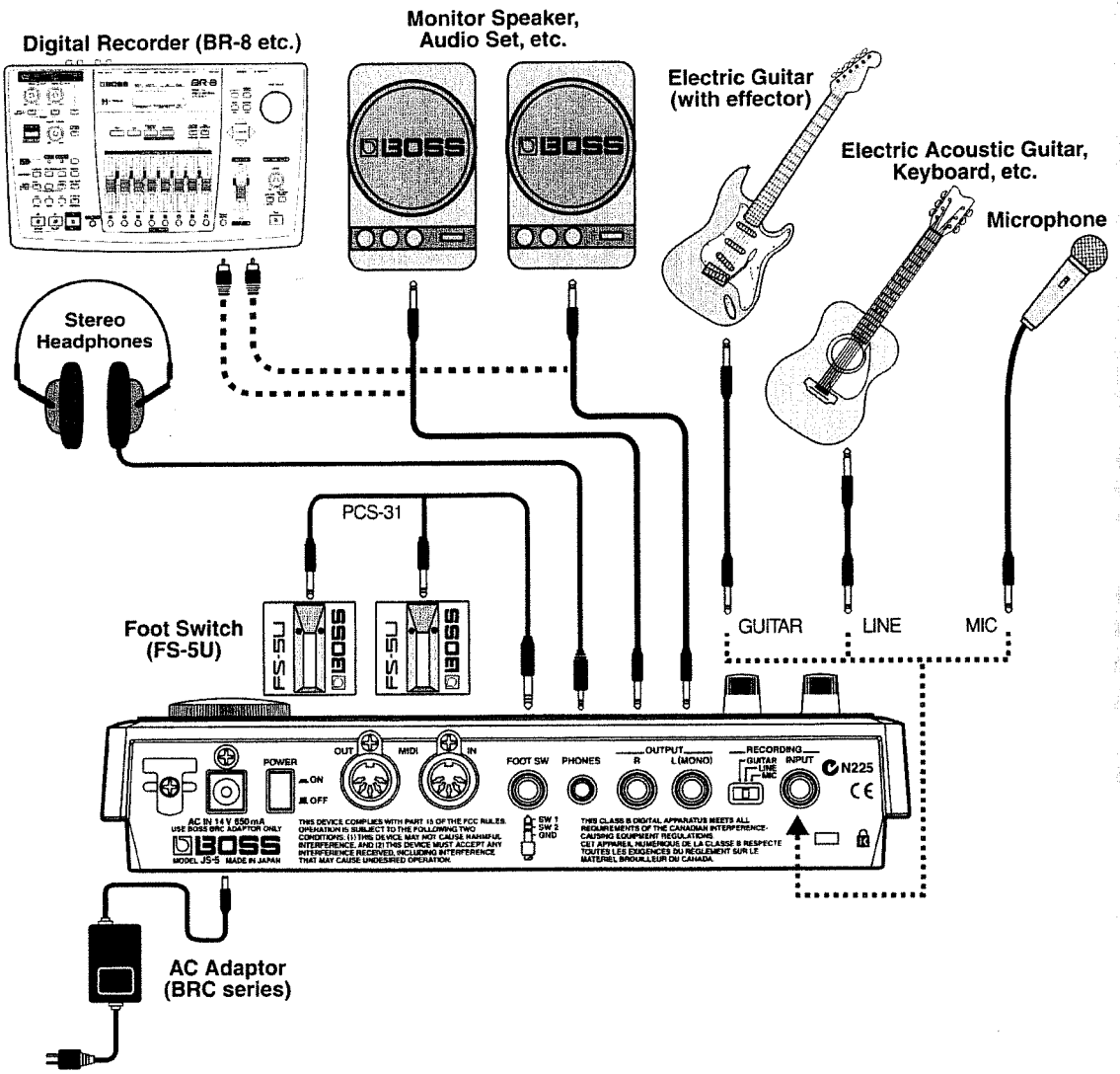
Making the Connections

The JS-5 does not have a built-in amp or speakers. To play sounds, you need to have on hand an amp or audio set, or some stereo headphones.

* *Audio cables, MIDI cables, stereo headphones, and foot switch are not included. They must be purchased separately.*

NOTE

To prevent malfunction and/or damage to speakers or other devices, always turn down the volume, and turn off the power on all devices before making any connections.



1 Before making the connections, check the following.

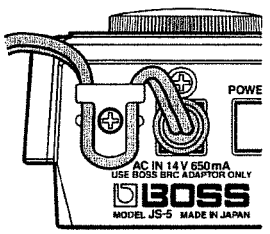
Is the volume level of the unit and the connected amp or other device turned down all the way?

Is the power to the unit and the connected amp or other device switched off?

2

Connect the included AC adapter to the JS-5, then plug the AC adapter into a power outlet.

* *To prevent the inadvertent disruption of power to your unit (should the plug be pulled out accidentally), and to avoid applying undue stress to the AC adaptor jack, anchor the power cord using the cord hook, as shown in the illustration.*



3

Connect the amp or audio set as shown in the figure.

If necessary, connect stereo headphones.

* *To get the best performance out of the JS-5, we recommend stereo use.*

For monaural use, make the connection to the OUTPUT L (MONO) jack.

- **For making connections to the MIDI connectors, see (p. 131).**
- **For making a connection to the FOOT SW jack, see (p. 117).**

Switching On the Power

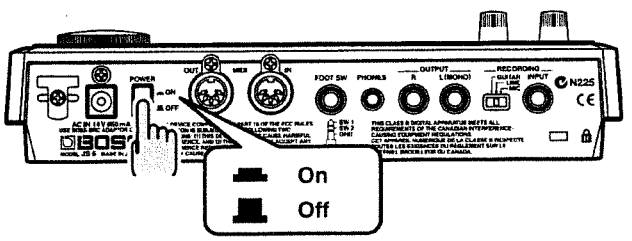
Once the connections have been completed, turn on power to your various devices in the order specified. By turning on devices in the wrong order, you risk causing malfunction and/or damage to speakers and other devices.

1 **Before you switch on the power, check the following.**

Are the external devices connected correctly?

Is the volume level of the unit and the connected amp or other device turned down all the way?

2 **Turn on the POWER switch on the rear panel of the JS-5.**

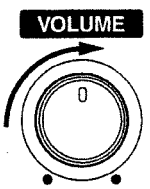


* *This unit is equipped with a protection circuit. A brief interval (a few seconds) after power up is required before the unit will operate normally.*

3 **Switch on the power to the amp or other device.**

4 **Adjust the volume level on the JS-5.**

Press [START] to start playing. Use [VOLUME] to adjust the volume to the appropriate level.



5 **Also adjust the volume of the connected amp or other device to an appropriate level.**

6 **After adjusting the volume, press [STOP] to stop playing.**

Switching Off the Power

1 **Before you switch off the power, check the following.**

Is the volume level of the unit and the connected amp or other device turned down all the way?

2 **Switch off the power to the amp or other device.**

3 **Switch off the power to the JS-5.**

Let's Try Playing Some Sounds

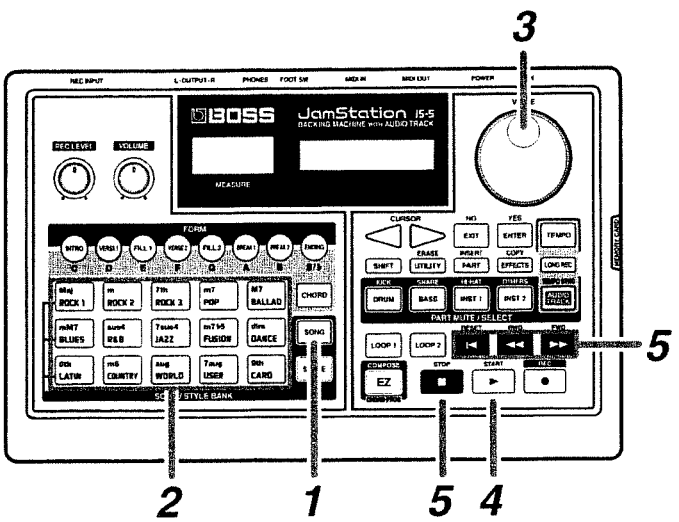
Listening to the Preset Songs

The JS-5 has 200 Preset (onboard) songs. Try choosing and playing a variety of songs.

The 200 Preset Songs are classified by **category**, such as rock or jazz.

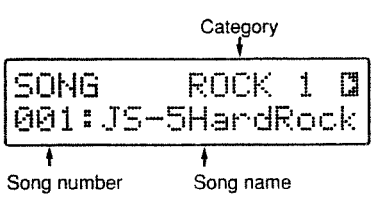
Preset Song List (p. 141)

On the JS-5, each such composition is called a **song**.
The songs that were put on board the unit at the factory are called **Preset Songs**, while the songs you create yourself are called **User Songs**.



1 Press [SONG], getting the button to light.

The Song screen appears.



2 Press [SONG/STYLE BANK] and select a category.

The category you selected appears.

ROCK 1..... Hard rock, Heavy metal
ROCK 2..... Typical Rock of the sixties through nineties
ROCK 3..... Basic Rock
POP..... Pops, 8-beat, and 16-beat
BALLAD..... Ballad
BLUES..... Blues
R&B..... Rhythm and blues, funk, and soul
JAZZ..... Jazz

FUSION ..... Fusion
DANCE..... Hip hop, techno, etc.
LATIN..... Salsa, bossa nova and samba, etc.
COUNTRY..... Country
WORLD ..... World music
USER..... User Songs 1 through 100
CARD ..... Card User Songs 1 through 100

* *If no memory card is inserted, you can't select "CARD" even if [CARD] is pressed.*

3 Turn [VALUE] to select a song.

The name of the song you select (the song name) appears.

* *The number of songs varies from one category to another.*

4 Press [START] to start playing the song.

[START] flashes in time to the beat set in the selected Style.

* *If you've made the setting for count-in (p.60), the count-in appears on the left-hand display, and the count sound is played at the same time. After the count-in display, the sound starts to play.*

The lighted [FORM] buttons ([INTRO] through [ENDING]) change along with what is played, showing the present performance pattern (form).

What Is a Form? (p. 27)

5 Press [STOP] to stop playing.

Press [FWD] to move to the next measure.

Press [RWD] to go back one measure.

Press [RESET] to go back to the beginning of the song.

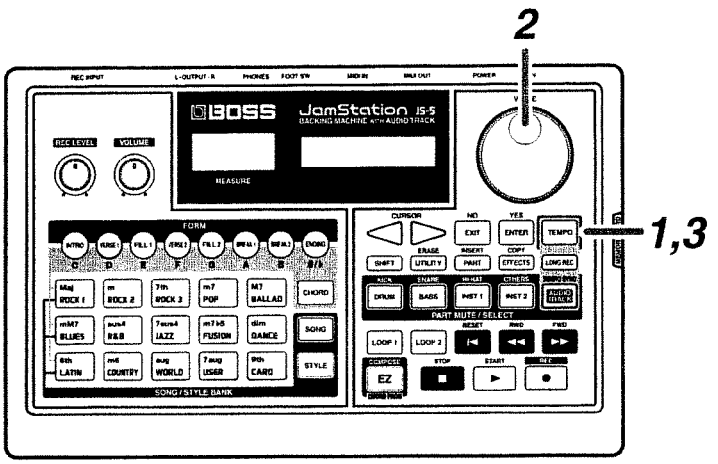
* *When the performance reaches the end, it stops automatically.*

■ **You can play specified measures over and over.**

→ "Repeatedly Playing Back a Song (Loop Play)" (p. 116)

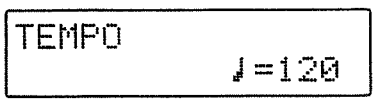
Changing the Tempo of a Performance

Next, try changing the tempo of the song being played.



1 **Press [TEMPO], getting the button to light.**

The present tempo appears on the display.



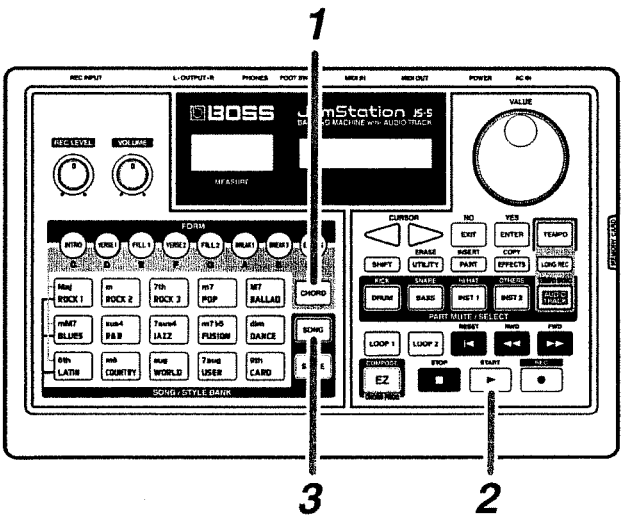
2 **Turn [VALUE] to adjust the tempo.**

Settings values: 40–250

3 **Once you've decided on the tempo, press [TEMPO], extinguishing the button's light.**

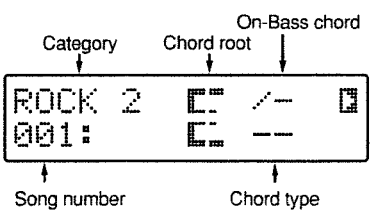
Displaying the Chord Progression

You can switch to a screen (Chord screen) where the chord progression is displayed, and check the chord progression.



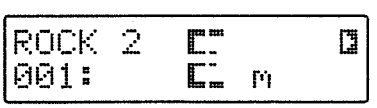
1 **Press [CHORD], getting the button to light.**

The Chord screen appears.



2 **Press [START] to start playing the song.**

When the chord changes, the display of the next chord.



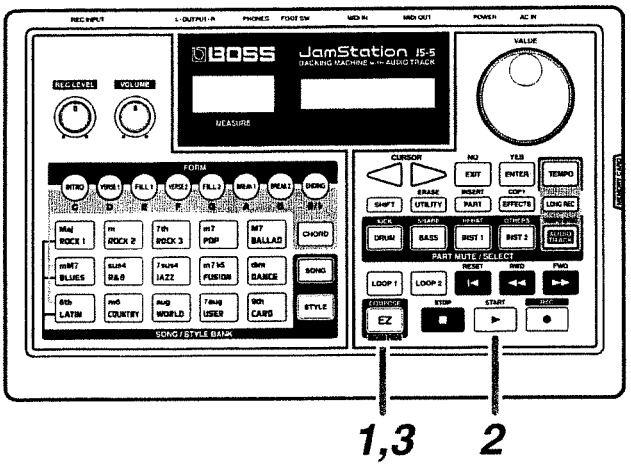
3 **To go back to the Song screen, press [SONG], getting the button to light.**

? The root specifies the basic note of a chord. All chords are structured with the root as the base, and the name of the root tone also appears in upper case in the chord name.

? An on-bass chord is a chord that uses bass for a note other than the root, such as an "F (Maj)" chord with "G" as the bass note. This is usually expressed as "F/G" or "F on G."

Listening with a Different Chord Progression

The Preset Songs feature one additional Chord Progression. Let's try playing a Preset Song after switching to this Chord Progression.



1 While play is stopped, hold down [SHIFT] and press [EZ], getting the button to light.

2 When [START] is pressed, the performance begins with different chord progression.

3 To return to the original Chord Progression, hold down [SHIFT] and press [EZ] while play is stopped, extinguishing the button's light.

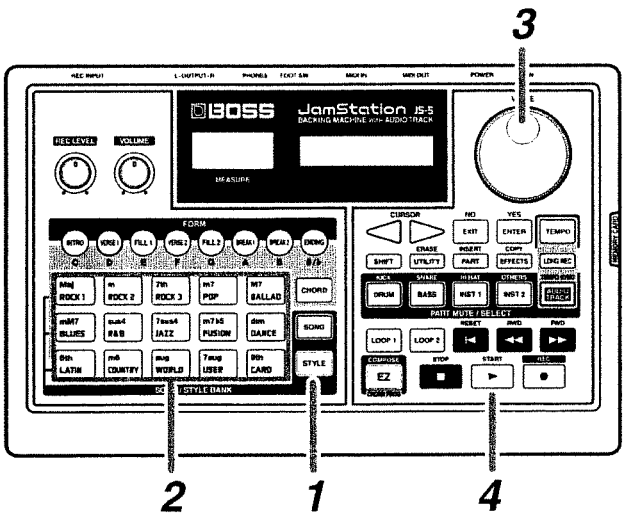
* *You cannot switch the Chord Progression if [SHIFT] + [EZ] is pressed while a song is playing.*

Changing the Style of a Preset Song

You may want to try changing the Style of a Preset Song. The JS-5 has 200 types of Preset (built-in) Style. Let's try choosing and play a variety of Styles.

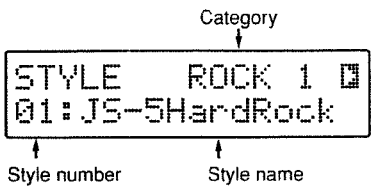
The 200 Preset Styles are classified by **category**, such as rock or jazz.

When you change the Style, the song plays in a manner that matches the chosen Style, even when the chord progression set for the Preset Song remains the same.



1 **While play is stopped, press [STYLE], getting the button to light.**

The **Style screen** appears.



2 **Press [SONG/STYLE BANK] and select a category.**

The category you select appears.

About Styles

Music includes songs in a wide variety categories (musical styles), such as rock and jazz. Songs in the same category use more or less the same performance patterns (phrasing) and instruments, or the tempo and the like are more or less the same, and this makes it possible to recognize the category's distinctive ambience.

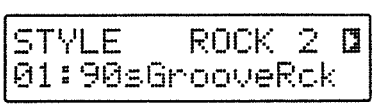
The JS-5 has built-in Preset Styles that group together the accompaniment performance patterns, instruments (parts), and tempos for each category, so you can easily create songs with distinctive ambience using these Styles.

ROCK 1 ..... Hard rock, Heavy metal
ROCK 2 ..... Typical Rock of the sixties through nineties
ROCK 3 ..... Basic Rock
POP ..... Pops, 8-beat, and 16-beat
BALLAD ..... Ballad
BLUES ..... Blues
R&B ..... Rhythm and blues, funk, and soul
JAZZ ..... Jazz
FUSION ..... Fusion
DANCE ..... Hip hop, techno, etc.
LATIN ..... Salsa, bossa nova and samba, etc.
COUNTRY ..... Country
WORLD ..... World music
USER ..... User Styles 1 through 20
CARD ..... Card User Styles 1 through 20

* *If no memory card is inserted, then you can't select "CARD" even when you press [CARD].*

3 Turn [VALUE] to select a Style.

The name of the Style you chose (Style name) appears.



* *The number of Styles varies from one category to another.*

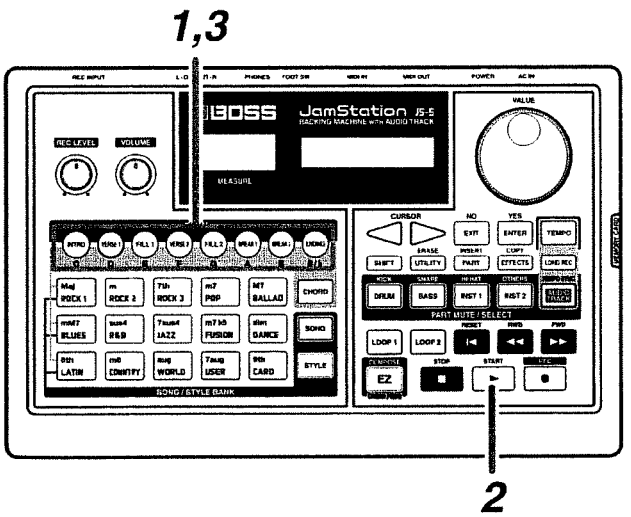
4 Press [START] to start playing the song.

■ **You can create your own original Style.**

→ "Creating User Styles" (p. 119)

Switching Forms

Let's try playing a Preset Song using Forms you select yourself.



* *When a Form is switched, the entire sequence of forms set for the Song is disabled. When [RESET] is pressed, the sequence of forms set for the Song is restored.*

1 **Press [FORM] ([INTRO] through [ENDING]) to select the first Form to be played.**

If you select a form other than the currently selected form (for which the button is lit), the button will blink, and playback will pause.

2 **Press [START], and playback will begin with the currently selected form.**

When the first-selected form finishes playing, playback will switch to the form that had been paused. The button will change from blinking (paused) to lit (playing).

3 **Press [FORM] (INTRO–ENDING) to switch the Form.**

The form will change at the measure following the point where you pressed the button, and the button will change from blinking to lit.

- In the case of VERSE 1 and VERSE 2, the performance will continue repeating until playback switches to the next form.
- If you switch to either FILL 1, FILL 2, BREAK 1, or BREAK 2, playback will automatically switch to the previously-selected VERSE 1 or VERSE 2 when the performance ends.

What is a Form?

Forms are the performance patterns from which a song is put together.
The JS-5 has eight types of Forms available for selection for each Style.

INTRO:
Intro

VERSE 1, 2:
The main performance patterns. 1 is the basic pattern, and 2 is a variation.

FILL (Fill-In) 1, 2:
Ornamental performance patterns that are inserted at appropriate points, such as where one Phrase goes into another. Select 1 or 2 depending on the form that follows the fill-in.

BREAK 1, 2:
Blank sections that temporarily stop a melody or rhythm. Two different Breaks can be prepared.

ENDING:
Performance patterns that serves as the concluding portion of a musical composition.

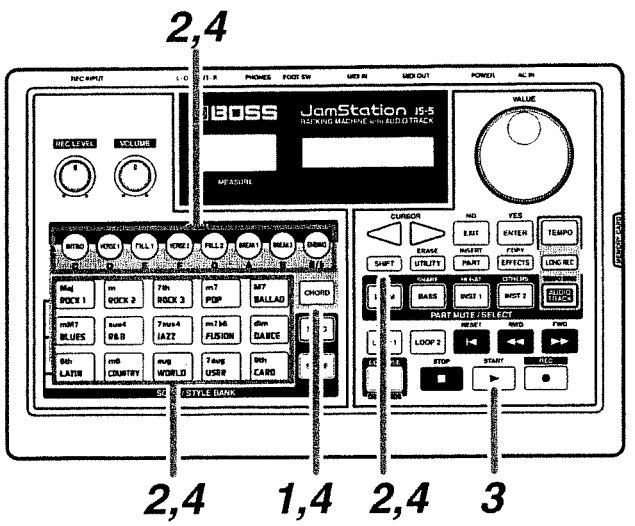
- In the case of ENDING, you will return to the beginning of the song when playback ends.

* *When playback reaches the number of measures specified for the song, playback will stop and you will return to the beginning of the song.*

Entering a Chord

Let's try playing a Preset Song with chords you enter yourself.

* *When you enter a chord, all the set chords in the song are deactivated. With performance halted, pressing [RESET] enables the song's set chord progression.*



1 **Press [CHORD], getting the button to light.**

The Chord screen appears.

2 **Use the following buttons to enter a chord.**

- Use [C] through [B] and [#/b] to specify the root of the chord.

  Pressing [#/b] repeatedly cycles through the selections of "#," "b," and "none."

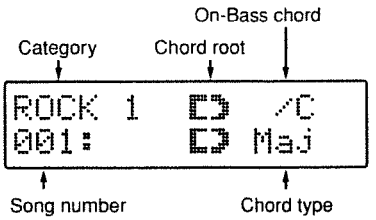
- Use [Maj] through [9th] to specify the chord type.

- To specify an On-Bass chord, hold down [SHIFT] and use [C] through [B] and [#/b] to specify the bass tone.

* *To eliminate an On-Bass chord, press [CURSOR] to get the On-Bass Chord indication to begin flashing, then turn [VALUE] so that "–" is selected.*

? The root specifies the basic note of a chord. All chords are structured with the root as the base, and the name of the root tone also appears in upper case in the chord name.

? An on-bass chord is a chord that uses bass for a note other than the root, such as an "F (Maj)" chord with "G" as the bass note. This is usually expressed as "F/G" or "F on G."



3 When [START] is pressed, the performance begins with the input chord.

4 Input the chords as needed.

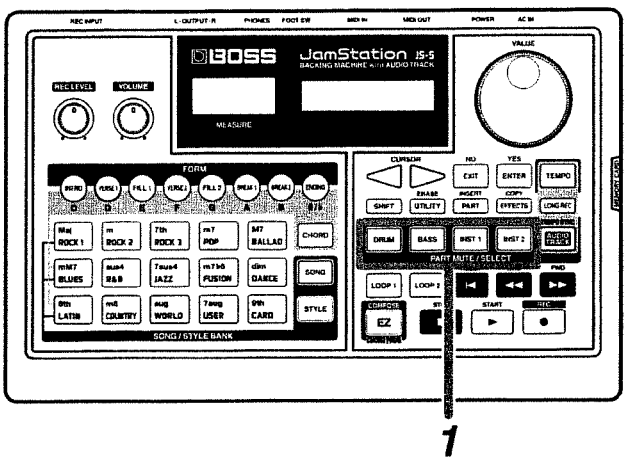
■ **You can input chord types unavailable with [Maj]–[9th].**

→ "Playing with Chords You Enter Yourself" (p. 62)

Using As a Rhythm Machine

A song's performance pattern is played using these four parts: "Inst (instrument) 1," "Inst (instrument) 2," "Drum," and "Bass."

By playing just the drum part of a song, you can use the JS-5 as a rhythm machine.

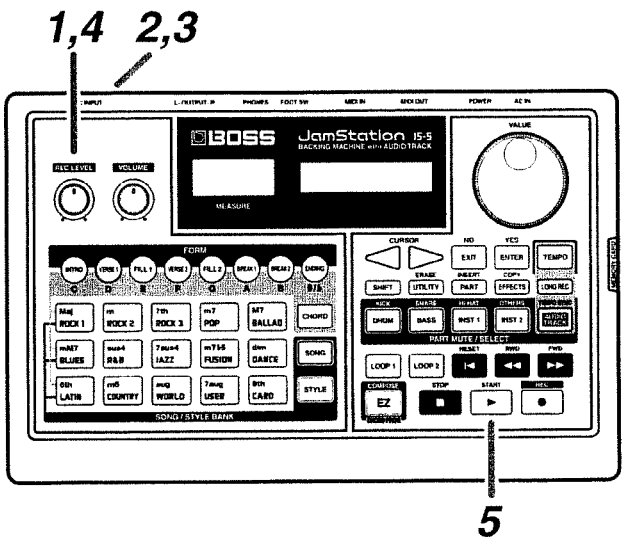


1 **Press the [PART MUTE] [BASS], [INST 1], and [INST 2] buttons to make the button lights go dark.**

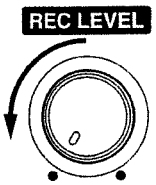
When a button is not lighted, its corresponding part is muted out (silent).

Playing Along with a Song on Guitar

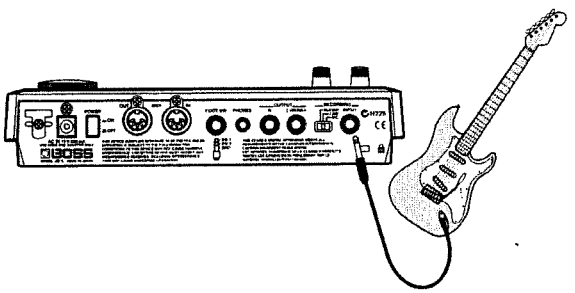
Let's try connecting an electric guitar to the JS-5 and play along with a song on the guitar.



1 Turn [REC LEVEL] counterclockwise all the way.



2 Connect the electric guitar to the REC INPUT jack.

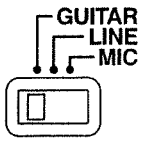


3 Set the REC INPUT selector switch appropriately.

GUITAR: When an electric guitar (or bass) is connected, or when an electric guitar (or bass) and an effects processor are connected (The Guitar Amp Simulator is working.)

LINE: When an electric acoustic guitar is connected, or when a keyboard is connected

MIC: When a microphone is connected



4 Turn [REC LEVEL] to adjust the volume level of the connected equipment.

* *Howling could be produced depending on the location of microphones relative to speakers. This can be remedied by:*

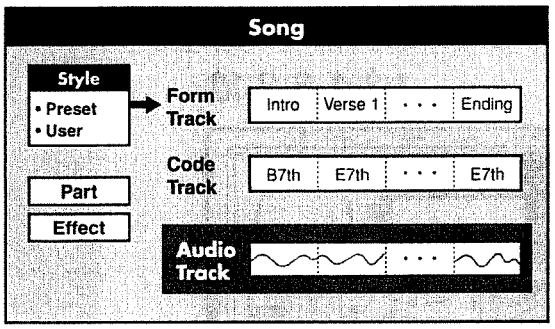
1) Changing the orientation of the microphone(s).
2) Relocating microphone(s) at a greater distance from speakers.
3) Lowering volume levels.

5 Select a song, then press [START] to start playing the song.

Let's Create a Song

With the JS-5, you can create maximum 100 original songs (User Songs). Let's try creating an actual song.

Before we create a song, let's take a quick look at how a song is put together.



Style:

This selects a Style in a category that matches your concept for the song.

Form track:

This specifies the sequence for playing the Forms such as intro, fill-in, and ending corresponding to the Style you chose.

Chord track:

This specifies the chord progression for playing the Forms.

Audio track (User Song only):

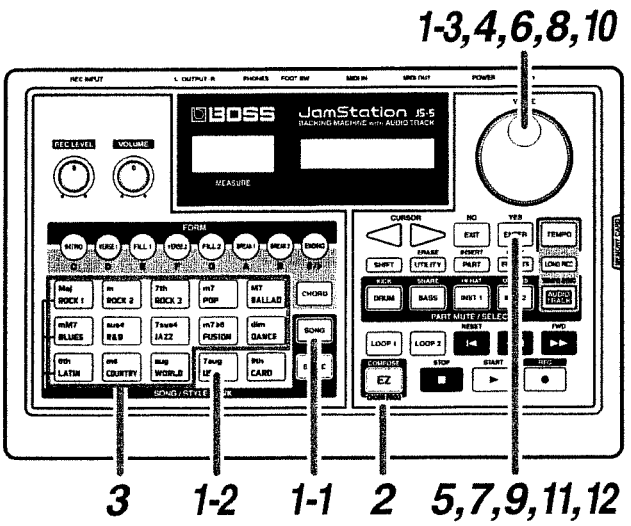
This records guitar play, vocals, or other sounds input to REC INPUT.

MEMO

The Form track and Chord track together are referred to as the Sequence tracks.

Composing Your Own Original Song (EZ Compose)

Using EZ Compose makes it easy to create your own original songs.



1 Select a User Song to be recorded.

1-1 Press [SONG], getting the button to light.

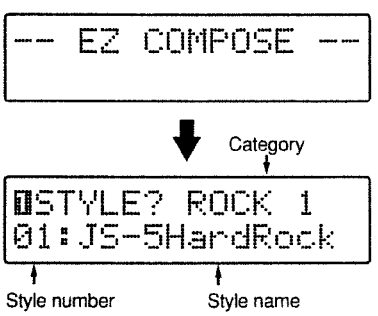
1-2 Press [USER].

1-3 Turn [VALUE] to select a song.

A User Song where no data is recorded will have an "*" next to the song number.

2 Press [EZ], getting the button to light.

The Start screen for EZ Compose appears for about one second, and then the Style Selection screen appears.



MEMO

To cancel EZ Compose, press [EZ] to make the button go dark.

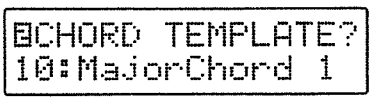
3 Press [SONG/STYLE BANK] and select a category.

4 Turn [VALUE] to select a Style.

* *When you press [START], the Style is played using the Forms selected at that time.(A chord progression will not be added.)*

5 Once you've decided on the Style, press [ENTER].

The Chord template Selection screen appears.



6 Turn [VALUE] to select a Chord template.

A **Chord template** groups the Form sequences and chord progressions together into a single set.

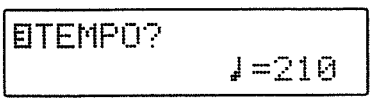
BluesChord 1–9: Selected when creating songs with blues chord progressions.

MajorChord 1–24: Selected when creating songs consisting of major melodies.

MinorChord 1–17: Selected when creating songs consisting of minor melodies.

7 Once you've decided on a Chord template, press [ENTER].

The Tempo Setting screen appears.

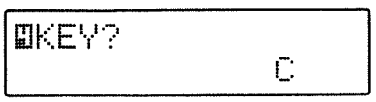


8 Turn [VALUE] to set the tempo.

Settings values: 40–250

9 Once you've decided on the tempo, press [ENTER].

The Key Setting screen appears.

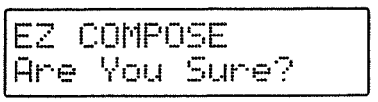


10 Turn [VALUE] to specify the key (root) of the song.

You can specify a key from C to B, in semitone steps.

11 Once you've decided on the key of the song, press [ENTER].

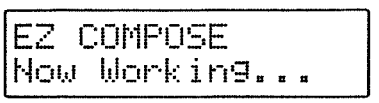
A screen asking you to confirm that you want to proceed with EZ Compose appears.



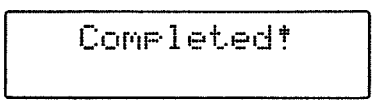
* *To cancel, press [EXIT].*

12 Press [ENTER] to carry out EZ Compose.

Generation of the song data starts.



When the generation of the song data finishes, the screen shown below appears. After that, the Song screen appears.



* *The song that is generated will automatically be given a song name that is the same as the Chord template.*

■ **The name of the song can be changed.**

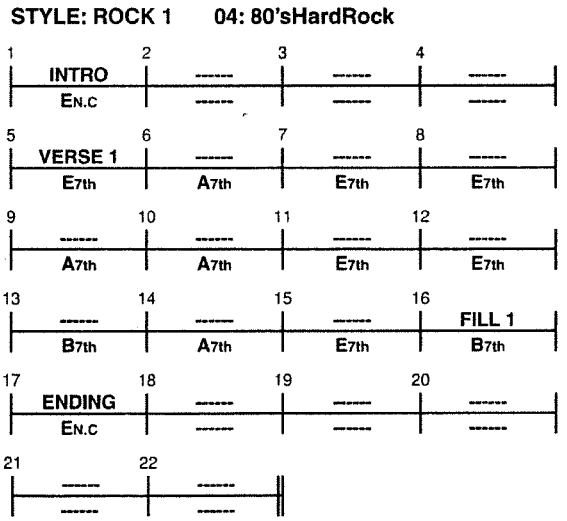
→ "Naming the Song" (p. 74)

Creating a Song from a Score

You can compose a song by choosing a Style and recording the Forms and Chord Progression.

This section uses examples to describe the steps for composing a song like the one below.

This records a song that combines a Rock Style with a Blues Chord Progression.



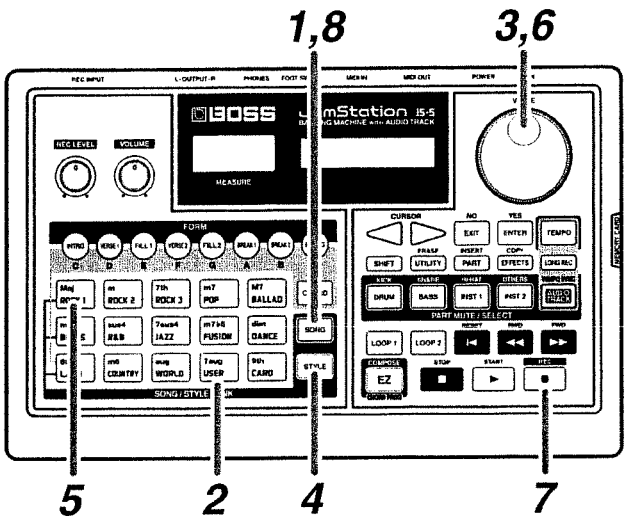
N.C. (Non-Chord Type)

Select this type when you want to have the original performance data played as is, with no conversion of the chords.

Since the "Intro" and "Ending" Chord Progressions are included in the original performance data, you can have the Chord Progressions in the performance data played as is by specifying Non-Chord Type.

Normally, when the Chord Type with a root of "C" is changed to "N.C.," the performance data is played with no conversion of the chords.

If the root is a note other than "C," the original performance data is played based on that root. For example, when "D" is selected with Non-Chord Type, the original performance data is played a whole step up from the original data.



(1) Select the destination for recording.

Select the destination for recording the User Song.

1 **Press [SONG], getting the button to light.**

2 **Press [USER].**

3 **Turn [VALUE] to select a song.**

A User Song where no data is recorded will have an "*" next to the song number.

(2) Select a Style.

4 **Press [STYLE], getting the button to light.**

5 **Press [SONG/STYLE BANK] and select a category.**

In this example, select "ROCK 1."

6 **Turn [VALUE] to select a Style.**

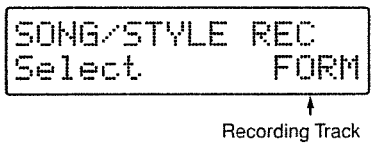
In this example, select "04: 80'sHardRock."

(3) Select a recording track.

7

Press [REC], getting the button to light.

[SONG], [CHORD], and [AUDIO TRACK] flash, and the Recording Track Selection screen appears.



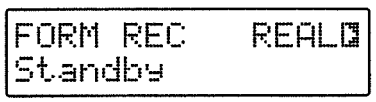
* *To cancel, press [EXIT].*

First, record the Form.

8

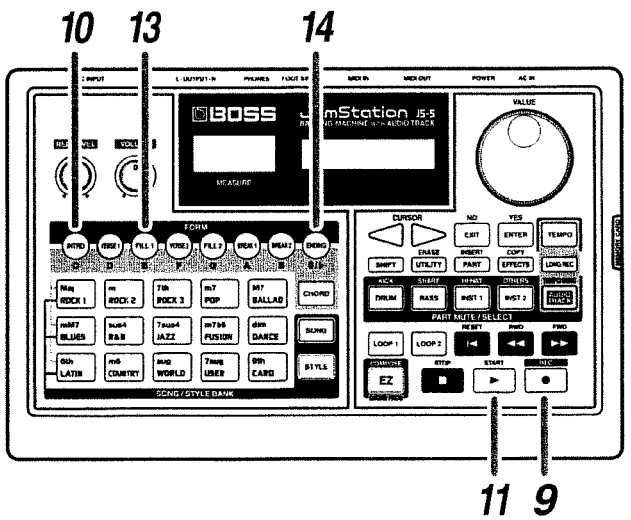
Press [SONG] to select the Form Track.

The Recording Standby screen for the Form appears. [SONG] lights up.



(4) Record the Forms.

Record the Forms on the Form Track. In this example, let's try using **Realtime** recording.



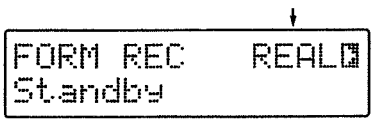
?

Realtime recording is a method for recording selected Forms on the Form Track while pressing [FORM] and playing the Forms one after another.
Another recording method is **Step recording**, where you specify a Form for each measure or beat.
For more information, see "About Creating User Songs" (p. 56).

9

Press [REC] to display "REAL."

Realtime recording is now selected.



10

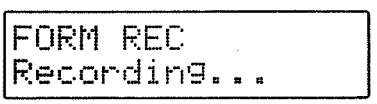
Press [FORM] to select the Form to be recorded first.

Here, press [INTRO], getting the button to light or flash.

11

Press [START].

The Realtime Recording screen for the Form appears, and recording first begins from the intro selected.



When the intro finishes playing, the JS-5 automatically changes to playback of Verse 1. In this case, the JS-5 changes to Verse 1 in the second measure, and [VERSE 1] lights up.

12

Continue by playing Verse 1 in measures 5 through 15.

13

While playing the last beat of measure 15, press [FILL1].

The button flashes.

At the beginning of measure 16, performance of Fill 1 starts, and the button changes from flashing to steadily lit.

14

While measure 16 is playing, Press [ENDING].

The button flashes.

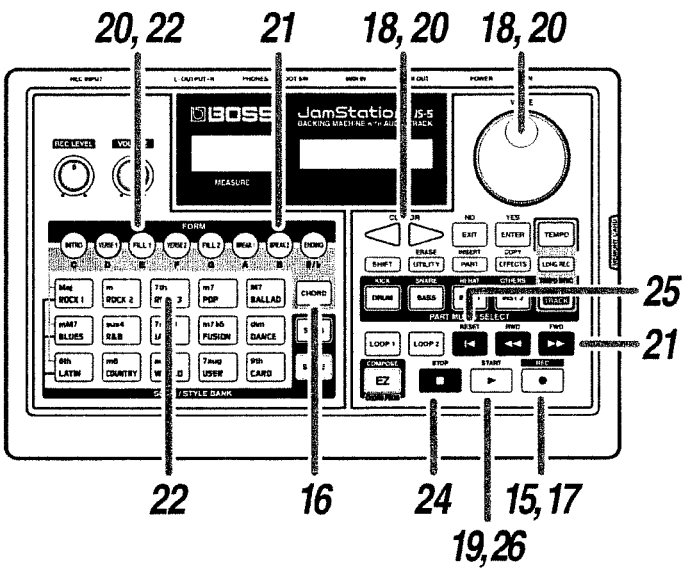
At the beginning of measure 17, performance of the ending starts, and the button changes from flashing to steadily lit.

When the edited portion of the performance is over, the performance is stopped, and recording is finished.

[REC] goes dark, and the Song screen reappears.

(5) Record the chords.

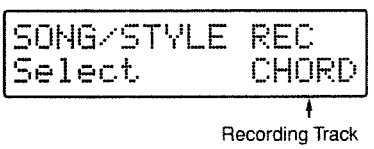
Record the chord progression on the Chord Track. In this example, let's try using **Step** recording.



15

Press [REC], getting the button to light.

[SONG], [STYLE], [CHORD], and [AUDIO TRACK] flash, and the Recording Track Selection screen appears.

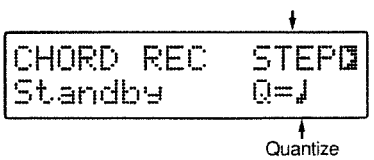


* *To cancel, press [EXIT].*

16

Press [CHORD] to select a Chord Track.

The Recording Standby screen for the Chord appears. [CHORD] lights up.



?

Step recording is a method for recording where you specify a chord for each individual measure or beat. Another recording method is Realtime recording, where you specify chords matched to the Forms being played. For more information, see "About Creating User Songs" (p. 56).

17 Press [REC] to display "STEP."

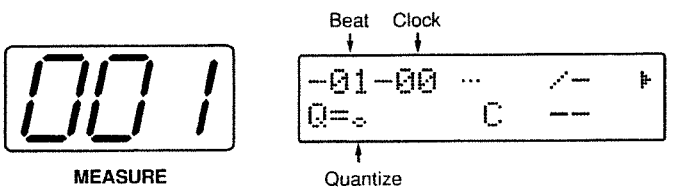
Step recording is now selected.

18 Press [CURSOR] to make the Quantize display flash, then turn [VALUE] to make the setting for quantizing.

In this example, set this to "𝅝" (whole note).

19 Press [START].

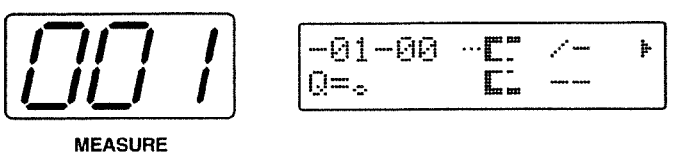
The Step Recording screen for chords appears, and recording begins.



20 Record the chord (Non-Chord Type "E") for the first measure.

Press [E].

Next, press [CURSOR ►], making the Chord Type display flash, then turn [VALUE] to select "- -" (Non-Chord Type).



21 Press [FWD] several times.

The operation proceeds with the timing (steps) for recording the next chord (E7th). In this example, it advances to measure 5.

22 Record the next chord.

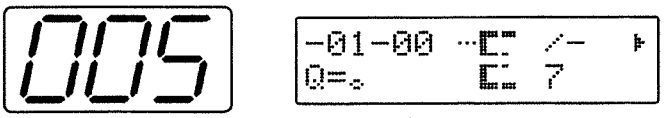
Press [E] [7th].

MEMO

Quantizing when using step recording sets the resolution of the steps that proceed when you press [FWD] or [RWD] in later operations.
The resolution with which a measure is divided is set by notes, and increasing the resolution of the notes increases the number of steps (the recording timing for the Form).

MEMO

A clock is an even smaller division of a beat. One beat is equal to 96 clocks.



23 **Repeat steps 21–22 to record all the chords in the score on p. 37.**

* *If the same chord continues, you can record the first chord and then omit the remainder of the recording for that chord. Move to the timing at which you wish to record a different chord.*

24 **When you've finished recording the chords, press [STOP].**

[REC] goes dark, and the Chord screen appears.

* *Press [SONG] to display the song screen.*

(6) Listen to the song you composed.

25 **Press [RESET].**

26 **Press [START].**

The song starts to play.

■ **You can have chords recorded at pitches one octave higher or lower than played.**

→ "Step Recording" (p. 71)

■ **You can give a name to the song you created.**

→ "Naming the Song" (p. 74)

■ **If you use a memory card (SmartMedia), you can save up to maximum 100 original songs (User Songs) on the card.**

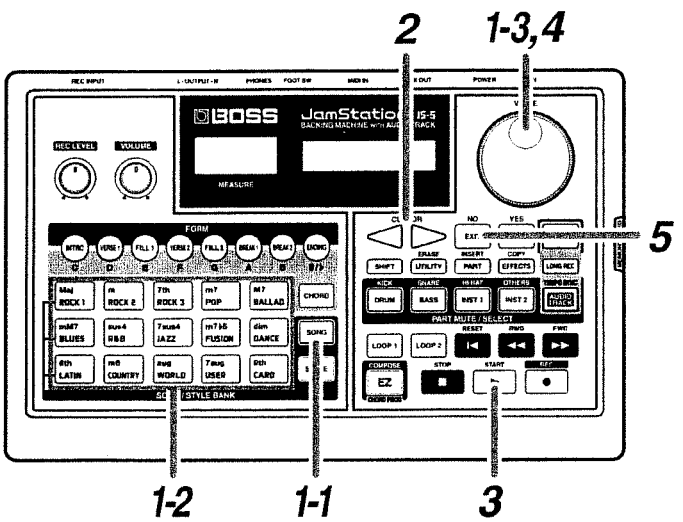
→ "Chapter 4 Creating User Songs" (p. 66)

Changing How a Song Plays

Changing the Key

You can use **Key Transpose** to change (transpose) the key of a song.

* *Although the keys of chords that are actually played are transposed when Key Transpose is set, the keys shown in the screen during performances or when recording do not change.*



? Key transposition involves shifting the overall pitch of the notes that are played.

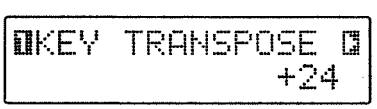
1 **Select a song.**

1-1 Press [SONG], getting the button to light.

1-2 Press [SONG/STYLE BANK] and select a category.

1-3 Turn [VALUE] to select a song.

2 **Press [CURSOR ►] to select "1 KEY TRANSPOSE."**



3 **Press [START].**

The song starts to play.

4 **Turn [VALUE] to set the key.**

Setting values: -24– +24

You can set the key in semitone steps within a range of two octaves up or down.

* *If you modify the settings of a preset song, these settings cannot be stored. If you wish to store the settings, copy them to a user song. (p. 82)*

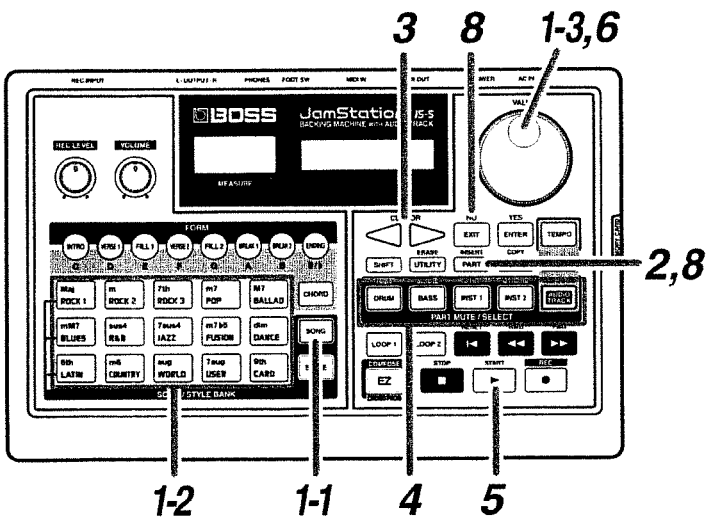
5 **When you've finished making the settings, press [EXIT].**

The display returns to the original screen.

Adjusting the Volume of Each Part

You can adjust the volume level of each of the parts that make up a Style: Inst 1, Inst 2, Drum, and Bass.

* *When a performance is recorded on the Audio Track, you can also adjust the volume level for this track.*



1 **Select a song.**

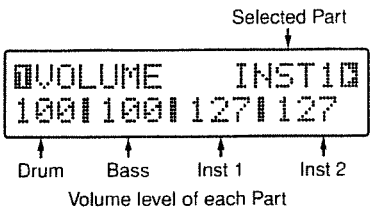
1-1 Press [SONG], getting the button to light.

1-2 Press [SONG/STYLE BANK] and select a category.

1-3 Turn [VALUE] to select a song.

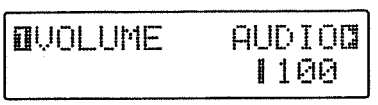
2 **Press [PART].**

3 **Press [CURSOR] to select "1 VOLUME."**



4 **Press [PART MUTE/SELECT] and select the part whose volume level you want to change.**

* *When a User Song to which audio data is recorded is selected, the following screen appears when [AUDIO TRACK] is pressed.*



5 **Press [START].**

The song starts to play.

6 **Turn [VALUE] to change the volume.**

Settings values: 0–127

7 **Repeat steps 4 and 5 as necessary.**

* *If you modify the settings of a preset song, these settings cannot be stored. If you wish to store the settings, copy them to a user song. (p.82)*

8 **When you've finished making the settings, press [PART] again, or press [EXIT].**

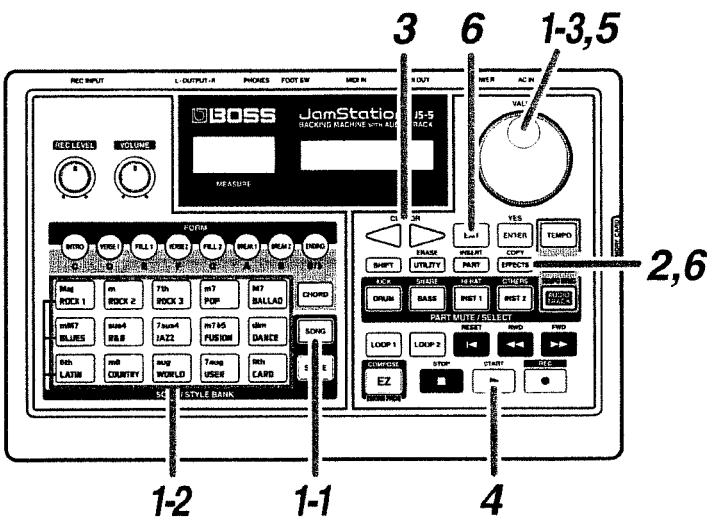
The display returns to the original screen.

Using Effects

The JS-5 is provided **effects** such as Reverb and Chorus.

In this example, let's change the settings for Reverb to check out what the effect does.

* *It is not possible to use effects on the sound input from REC INPUT.*



?

An effect modifies and produces a sound, such as by adding reverberations to a sound to express depth or delaying the sound to obtain a special effect.

1

Select a song.

1-1 Press [SONG], getting the button to light.

1-2 Press [SONG/STYLE BANK] and select a category.

1-3 Turn [VALUE] to select a song.

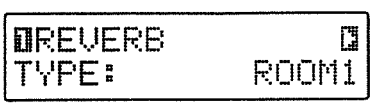
2

Press [EFFECTS].

3

Press [CURSOR] and select "1 REVERB TYPE."

This is the screen for setting the type of Reverb.



4

Press [START].

The song starts to play.

5

Turn [VALUE] to select the type.

Try changing to a variety of types and check out the different effects.

* *If you modify the settings of a preset song, these settings cannot be stored. If you wish to store the settings, copy them to a user song. (p. 82)*

6

When you've finished making the settings, press [EFFECTS] again, or press [EXIT].

The display returns to the original screen.

■ **You can vary the amount of reverb applied to each Part.**

→ "Changing the Amount of Chorus and Reverb Applied to Each Part" (p. 84)

■ **You can change the settings for effects in a variety of ways.**

→ "Changing Settings for Effects" (p. 86)

Let's Record Guitar Play

You can record your own performances to a song's (Preset/User) Audio track.

Here, select a Preset that appeals to you, copy it to the JS-5's User Songs, then record the performance of the guitar (or vocal, or other instrument) along with this song.

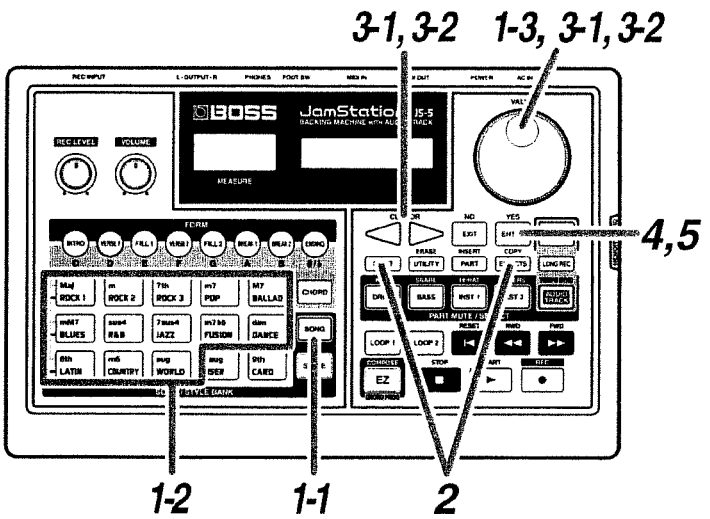
? Performance data recorded on the Audio Track is called "**audio data**."

* ***The following shows the recording time available using the JS-5.***

Hi-Fi: 1 minute, 35 seconds

LONG: 1 minute, 58 seconds

Copying a Preset Song



1

Select the Preset Song to be used as the copy source.

1-1 Press [SONG], getting the button to light.

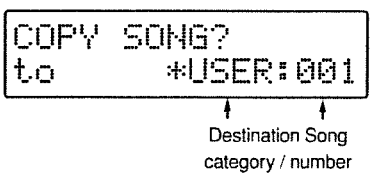
1-2 Press [ROCK 1] through [WORLD] and select a category.

1-3 Turn [VALUE] to select a song.

2

Press [COPY] ([SHIFT] + [EFFECTS]).

The copy-source designation screen appears.



3 Select the User Song to be used as the copy destination.

Here, select one of the JS-5's User Songs.

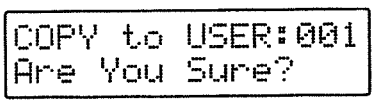
3-1 Press [CURSOR], and the Category indication will begin blinking. Then, turn [VALUE] to select "USER" (the JS-5).

3-2 Press [CURSOR], and the Song Number indication will begin blinking. Then, turn [VALUE] to select the song number.

* *User Songs with no data recorded in them are indicated by an "*" in the display.*

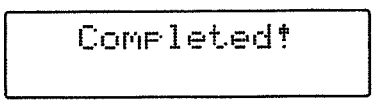
4 When you have decided on the copy destination, press [ENTER].

The copy confirmation screen appears.



5 Press [ENTER] when you want to execute the copy.

The copying begins. After it's been completed, the following screen appears, after which the copy-destination Song screen is displayed.

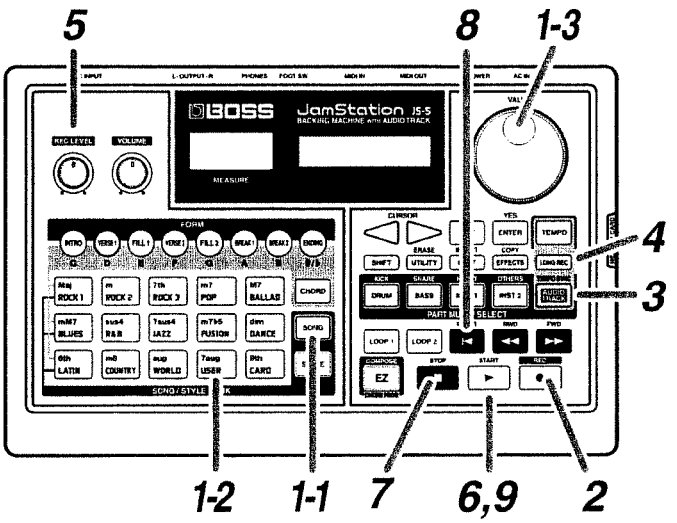


* *To cancel, press [EXIT]. The Copy screen reappears.*

MEMO

Each press of the [EXIT] button takes you back one screen.

Recording



1

Select the User Song to record.

Use the procedure previously described to select the copied song.

1-1 Press [SONG], getting the button to light.

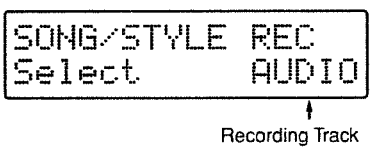
1-2 Press [USER].

1-3 Turn [VALUE] to select a song number.

2

Press [REC], getting the button to light.

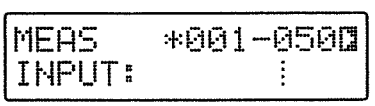
[SONG], [CHORD], and [AUDIO TRACK] flash, and the Recording Track Selection screen appears.



3

Press [AUDIO TRACK] to select the Audio Track.

The Recording Standby screen for the Audio Track appears.



* *When there is no audio data, a "*" appears on the screen.*

4

Press [LONG REC] and select the recording quality.

Hi-Fi: Select this when you want to perform high-quality recording.

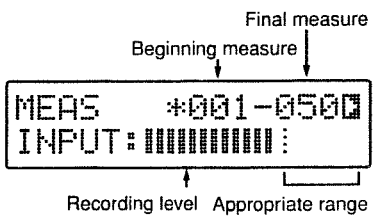
LONG: Select this when you want to make the recording time longer.

When you select "LONG," [LONG REC] lights up.

5

Adjust the recording level.

Play your guitar, and turn [REC LEVEL] to adjust the recording level of the sound that is input to REC INPUT so that the "▮" at the far right of the level meter is displayed within the appropriate range of levels (see diagram below).

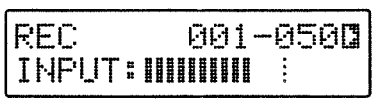


6

Press [START], getting the button to light, and start recording.

If you've made the setting for count-in (p. 60), the count-in appears on the left-hand display, and the count sound is played at the same time.

After the count-in display, recording starts.



7

When recording is finished, press [STOP].

[REC] goes dark, and the Song screen reappears.

Playback

8

Press [RESET].

9

Press [START].

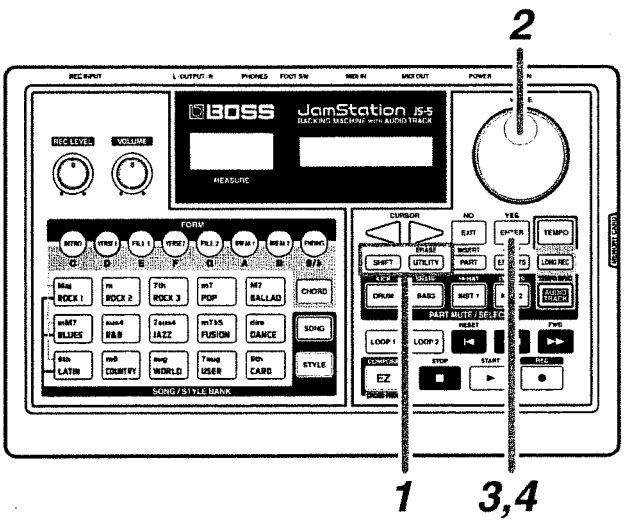
The audio data is played back in time with the performance.

?

The count-in is a count (metronome) sound of one or two bars inserted before the measure where recording starts. Using the count-in lets you make sure of the tempo and the timing for starting recording.

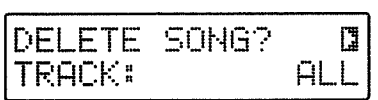
Deleting Recorded Data

To delete all audio data for the presently selected User Song, follow the steps below.

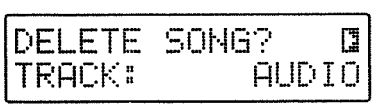


1 **At the Song screen, press [ERASE] ([SHIFT] + [UTILITY]).**

The Delete screen for Song appears.



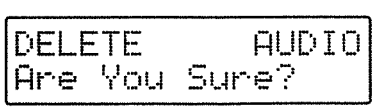
2 **Turn [VALUE] to select "AUDIO."**



3 **Press [ENTER].**

A screen prompting you to confirm deletion of the audio data appears.

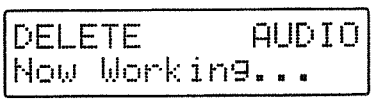
* *To cancel the operation, press [EXIT]. This returns you to step 2.*



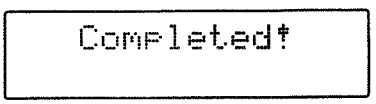
4 To delete the data, press [ENTER].

The audio data is deleted.

The following screen appears.



When the delete is completed, the Song screen reappears.



- **Would you like to know more about recording on the Audio Track?**

→ "Chapter 9 Recording Your Own Performance" (p. 111)

- **Using a memory card (smart media) makes it possible to record for longer times.**

→ "About Recording Time" (p. 111)

- **You can re-record only the measures in a specified portion.**

→ "Redoing a Recording (Rerecording)" (p. 113)

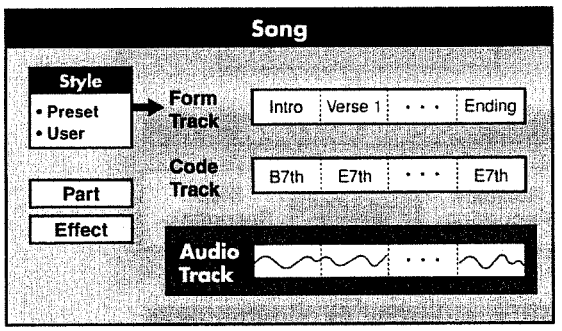
Chapter 1 Overview of the JS-5

About Songs

A single song on the JS-5 is called a **Song**. The JS-5's 200 internal Songs are referred to as **Preset Songs**, whereas Songs created by the user are called **User Songs**.

The JS-5 can hold maximum 100 User Songs, and you can store up to maximum 100 songs on optional memory cards (SmartMedia).

The 200 Preset Songs are classified by **category**, such as "Rock" and "Jazz."



About Styles

Styles comprise groupings of tempos and performance patterns and instruments (Parts) in the accompaniment sections in each category. You can create a song in a certain genre by basing the song on a Style.

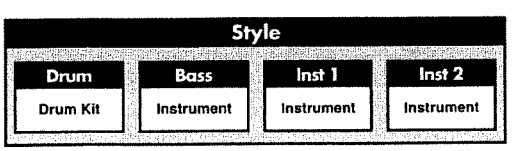
Each of the JS-5's 200 built-in Styles is called a **Preset Style**, whereas any Style created by the user is called a **User Style**. You can create twenty types of User Styles.

The JS-5 can hold maximum 20 User Styles, and you can store up to maximum 20 styles on optional memory cards (SmartMedia).

Furthermore, even with Styles in the same category, slightly different performance patterns are needed for a Song's different sections (intro, fill-ins, and so on). A performance patterns of this type called a **Form**, and up to eight different Forms may be used in one Style.

About Parts

Style performance patterns are played using four parts: "INST 1"; "INST 2"; DRUM; and BASS.



About Tracks

Songs feature the following three tracks.

Form Track:

Specifies the order in which the intro, fill-ins, endings, and other Forms for the selected Style are to be played.

Chord Track:

Specifies the chord progression, which causes the Forms to be played.

* *The Form track and Chord track together are referred to as the* ***Sequence tracks****.*

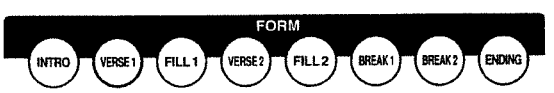
Audio Track:

Records guitar performances, vocals, and other sounds input to the REC INPUT.

* *Performance data recorded on the Audio Track is called "audio data."*

About Forms

Here are the eight different types of Forms that can be set up in each Style.



INTRO:

Intro

VERSE 1, 2:

The main performance patterns. 1 is the basic pattern, and 2 is a variation.

FILL (Fill-In) 1, 2:

Ornamental performance patterns that are inserted at appropriate points, such as where one Phrase goes into another. Select 1 or 2 depending on the form that follows the fill-in.

BREAK 1, 2:

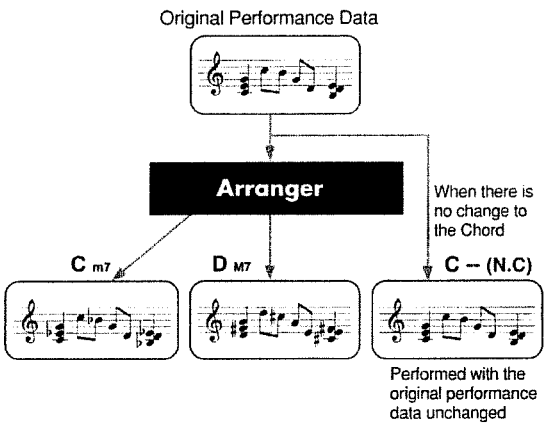
Blank sections that temporarily stop a melody or rhythm. Two different Breaks can be prepared.

ENDING:

Performance patterns that serves as the concluding portion of a musical composition.

About Styles and Chord Conversions

With the JS-5, Style performance data is converted according to the "Chord Name" recorded on the Chord Track. Preset Style performance data is created based on the conversion of the chords, and the data is converted and performed just by designating the chords.



* *Performances may change depending on the Arrange mode settings at the time the chords are converted (p. 119).*

By recording "N.C (Non-Chord Type) to the Chord Track, you can play performance data without any changes made to it.

About Creating User Songs

The following shows the main steps in creating User Songs.

(1) Select a Style to use from the Preset Styles or User Styles.

(2) Record the sequence of Forms to the Form Track.

There are two methods used for recording the Forms, **Realtime Recording**, in which each selected Form is recorded to the Form Track just as performed, by pressing the [FORM] button; and **Step Recording**, where Forms are specified one measure at a time.

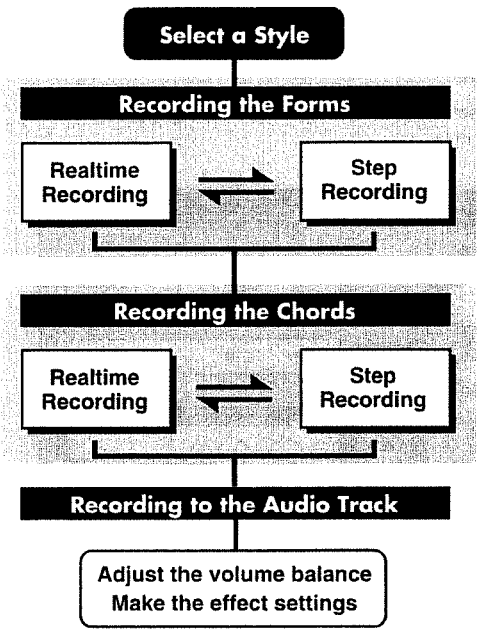
(3) Record the chords played in the Forms to the Chord Track.

There are two methods for recording the Forms, **Realtime Recording**, in which the Chords are recorded while synchronized with the performance of the Forms, and **Step Recording**, where Chords are specified one at a time for each measure or beat.

* *Editing of both Forms and Chords is carried out in Step Recording mode.*

(4) Record your own performance (sounds input to the REC INPUT) to the Audio Track.

(5) Adjust the volume balance and make the effect settings.



About Creating User Styles

You can create up to maximum 20 different Styles of your own. Just as with the Preset Styles, each User Style can be created using up to eight different Forms.

Performance patterns are made by designating the tones (instruments) for each part.

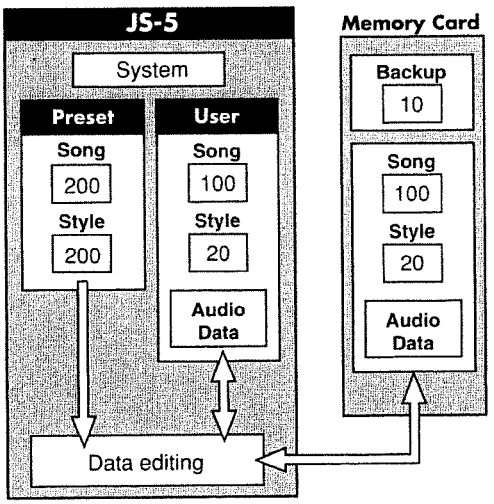
Recording of User Styles can also be done using **Realtime Recording**.

Although you can record performances just as they are played using Realtime Recording, **you cannot conduct Realtime Recording using the JS-5 by itself.**

Record performance patterns by playing a MIDI keyboard connected to the JS-5's MIDI IN connector.

About Memory

"Memory" refers to the places where settings, such as those for "Songs" and "Styles," are stored. The JS-5 features three types of memory: System Memory, User Memory, and Preset Memory. You can also use optional memory cards (SmartMedia).



System Memory

System Memory is where settings for the parameters that determine the JS-5's operating environment (such as Master Tune and MIDI parameters) are stored.

User Memory

User Memory is memory that holds rewritable data, allowing you to save settings that you create yourself. User Memory can be used to store maximum 100 User Songs and up to maximum 20 different User Styles.

Audio data is also stored here.

Preset Memory

Preset Memory holds settings that cannot be overwritten. 200 Preset Songs and 200 different Preset Styles are stored in the Preset Memory.

* *When recording to the Audio track of a Preset Song, the audio data is saved to the User Memory or a memory card.*

Memory Cards (SmartMedia)

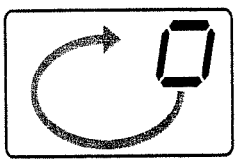
These are read/write cards to which data can be written. Just as with the User Memory, memory cards can store maximum 100 User Songs and maximum 20 different User Styles.

User Songs and User Styles stored on memory cards can be handled exactly the same way as User Songs and User Styles stored in the User Memory.

About Changing Data

When Changing Data in User Memory

Data is written to the User Memory during a number of different operations, such as when switching pages or pressing [ENTER], [EXIT], or [STOP]. At this time, " ▢ " will appear in the left display, and during execution the " ▢ " will rotate clockwise.



NOTE

Never turn off the power to the JS-5 or remove the memory card from the JS-5 while the " ▢ " still appears at the left of the display (when data is being written), as this can prevent the data from being written properly, and may adversely affect later operations.

When Changing Data in Preset Memory

Data in the Preset Memory is lost when a different operation is carried out, or when the power to the JS-5 is turned off. When you want to save data, you must first **copy** the data to the User Memory or a memory card.

When Changing Settings Stored in System Memory

In System Memory, since settings are changed and data created directly, the data is updated at all times.

About Procedures for Changing Settings

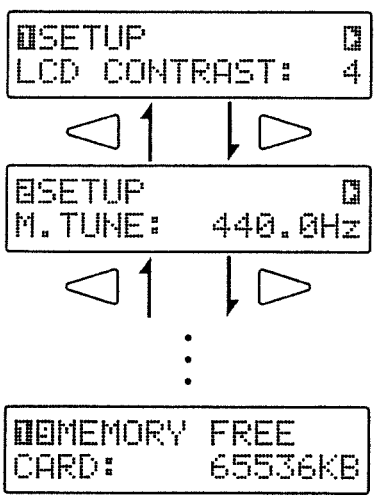
This section explains those of the JS-5's operations that are shared by the different functions.

Switching Pages

When a page appears in the display, a "▯" is displayed at the right of the page.

In this case, pressing [CURSOR ►] a number of times switches the display to the next page. To return to previous pages, press [CURSOR ◄] a number of times.

* *You can reduce the number of times you need to press the buttons by holding down [SHIFT] while pressing [CURSOR].*



How to Use [CURSOR] and [VALUE]

You can use [CURSOR] and [VALUE] when changing the settings appearing in the display.

[CURSOR]

Press these buttons to move to the position that shows the setting you want to change. Settings that can be changed flash in the display.

* *If you continue holding the button, the change will be continuous.*

* *If you hold down one button and press the other button, the change will become more rapid.*

[VALUE]

Rotate the [VALUE] dial to change the settings value. Changes in values are made continuously.

Holding down [SHIFT] while rotating the dial increases the rate at which the value changes.

Chapter 2 Playing a Song

To save the modified settings

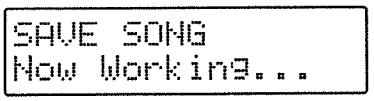
If you modify the settings of a user song, the modified content will be lost when you switch to another song/style. If you wish to keep the settings, use the following procedure.

1. Press [REC], getting the button to light.

* *To cancel, press [EXIT].*

2. Press [STOP].

The following screen will appear, and the settings will be saved.



When the settings have been saved, you will return to the previous screen.

NOTE

Never turn off the power to the JS-5 or remove the memory card from the JS-5 while the " ▢ " still appears at the left of the display (when data is being written), as this can prevent the data from being written properly, and may adversely affect later operations.

MEMO

If you have changed the settings for the Preset Songs, then if you want to save the settings, copy them to a User Song (p. 82).

HINT

If you press [SHIFT] + [REC], the settings will be saved immediately.

Playing a Song

Here we'll select and play a song from among the 200 Preset Songs and the User Songs (in the unit or on a memory card).

1. Press [SONG], getting the button to light.

The Song screen appears.

2. Press [SONG/STYLE BANK] and select a category.

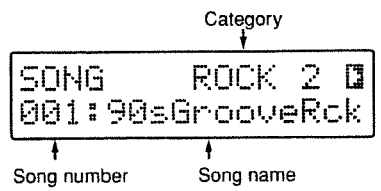
The category you selected appears.

ROCK 1 . . . . . Hard rock, Heavy metal
ROCK 2 . . . . . Typical Rock of the sixties through nineties
ROCK 3 . . . . . Basic Rock
POP . . . . . Pops, 8-beat, and 16-beat
BALLAD . . . . . Ballad
BLUES . . . . . Blues
R&B . . . . . Rhythm and blues, funk, and soul
JAZZ . . . . . Jazz
FUSION . . . . . Fusion
DANCE . . . . . Hip hop, techno, etc.
LATIN . . . . . Salsa, bossa nova and samba, etc.
COUNTRY . . . . Country
WORLD . . . . . World music
USER . . . . . User Songs 1 through 100
CARD . . . . . Card User Songs 1 through 100

* *If no memory card is inserted, then you can't select "CARD" even when you press [CARD].*

3. Turn [VALUE] to select a song.

The name of the song you select (the song name) appear.



* *The number of songs varies from one category to another.*

* *A User Song where no data is recorded will have an "*" next to the song number.*

4. Press [START] to start playing the song.

[START] flashes in time to the beat set in the selected Style.

* *If you've made the setting for count-in (p. 60), the count-in appears on the left-hand display, and the count sound is played at the same time. After the count-in display, the sound starts to play.*

The lighted [FORM] buttons ([INTRO] through [ENDING]) change along with what is played, showing the present performance pattern (form).

Also, pressing a button while play is in progress changes what is playing to the Form of the pressed button.

5. Press [STOP] to stop playing.

Press [FWD] to move to the next measure.

Press [RWD] to go back one measure.

Press [RESET] to go back to the beginning of the song.

* *When the performance reaches the end, it stops automatically.*

HINT

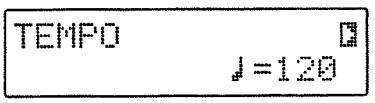
You can start playing in the middle of a song by using [FWD] and [RWD] to specify the measure, then pressing [START].

* *If you play in the middle of a song, the count-in will not be available.*

Changing the Tempo

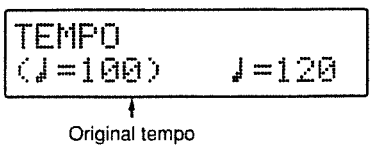
Now we'll change the tempo for playing the song.

1. **Press [TEMPO], getting the button to light.**
   The present tempo appears on the left-hand display.



2. **Turn [VALUE] to adjust the tempo.**
3. **Once you've decided on the tempo, press [TEMPO] to make the button go dark.**

If the selected song contains any audio data, the tempo used when the audio data was recorded (the original tempo) appears at the left of the screen.



When [ENTER] is pressed, the current tempo is set to the same value as that of the original tempo.

* *You cannot change the original tempo.*

* *If you wish to save the settings, execute the Save procedure (p. 59).*

Changing the Key

You can use **Key Transpose** to change (transpose) the key of a song.

* *Although the keys of chords that are actually played are transposed when Key Transpose is set, the keys shown in the screen during performances or when recording do not change.*

1. **At the Song screen, press [CURSOR ►] and select "1 KEY TRANSPOSE."**

2. **Turn [VALUE] to change the setting value.**
   Settings values: -24– +24
   You can make the setting in semitone steps within a range of two octaves up or down.

* *If you wish to save the settings, execute the Save procedure (p. 59).*

* *If you record a User Style before saving the Key settings, these settings are then deleted.*

Adding a Count-in

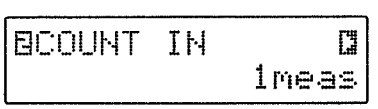
You can add a count-in of one or two measures when playing the song.

When you add a count-in, it appears on the left-hand display. Pressing [START] starts the count sound (the count-in), and after the count-in the song starts to play.

* *The count-in is sounded when you begin play or recording from the top of the song (the first measure). The count-in is not sounded when you begin play or recording from somewhere later in the song, even if you've set it so a count-in is to be played.*

* *The count-in you set here also remains in effect during realtime recording for Forms or chords (p. 67, 70), or when recording on the Audio Track (p. 112).*

1. **At the Song screen, press [CURSOR ►] to select "2 COUNT IN."**



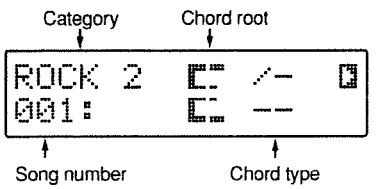
2. **Turn [VALUE] and make the setting for the count-in.**
   Settings values: OFF, 1meas, or 2meas
   To add a count-in, set this to "1meas" (measure) or "2meas" (measures).
   If you don't want to add a count-in, set this to "OFF."

* *If you wish to save the settings, execute the Save procedure (p. 59).*

Displaying the Chord Progression

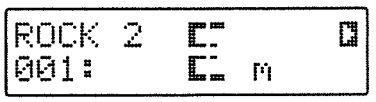
TThis changes the Song screen to a screen displaying the chord progression (Chord screen).

1. **Press [CHORD], getting the button to light.**
   The Chord screen appears.



* *You can switch to the Chord screen even while a song is playing.*

2. **Press [START] to start playing the song.**
   When the chord changes, the display of the next chord.



3. **To go back to the Song screen, press [SONG], getting the button to light.**

Playing with a Different Chord Progression

The Preset Songs feature an additional Chord Progression. You can play a Preset Song after switching to this Chord Progression.

1. **While play is stopped, press [SHIFT] + [EZ], getting the button to flash.**
2. **When [START] is pressed, the performance begins with different chord progression.**
3. **To return to the original Chord Progression, press [SHIFT] + [EZ] while play is stopped, extinguishing the button's light.**

* *You cannot switch the Chord Progression if [SHIFT] + [EZ] is pressed while a song is playing.*

MEMO

When copying a song (p. 82), the Chord Progression selected at that time is copied.

Playing with a Different Style

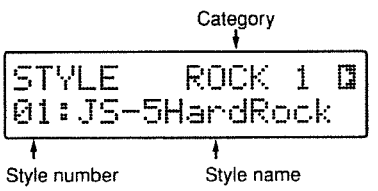
You can select a Style from among the 200 types of Preset Styles and the maximum 20 types of User Styles, and switch to that Style.

When you change the Style, the song plays in the chosen Style, with the chord progression set for the Preset Song remaining the same.

1. **While play is stopped, press [STYLE], getting the button to light.**
2. **Press [SONG/STYLE BANK] and select a category.**
   The category you chose appears.
   ROCK 1 . . . . . Hard rock, Heavy metal
   ROCK 2 . . . . . Typical Rock of the sixties through nineties
   ROCK 3 . . . . . Basic Rock
   POP . . . . . Pops, 8-beat, and 16-beat
   BALLAD . . . . . Ballad
   BLUES . . . . . Blues
   R&B . . . . . Rhythm and blues, funk, and soul
   JAZZ. . . . . Jazz
   FUSION . . . . . Fusion
   DANCE . . . . . Hip hop, techno, etc.
   LATIN . . . . . Salsa, bossa nova and samba, etc.
   COUNTRY . . . . Country
   WORLD. . . . . World music
   USER . . . . . User Styles 1 through 20
   CARD. . . . . Card User Styles 1 through 20

* *If no memory card is inserted, then you can't select "CARD" even when you press [CARD].*

3. **Turn [VALUE] to select a Style.**
   The name of the Style you chose (Style name) appears.



* *The number of Styles varies from one category to another.*

4. **Press [START] to start playing the song.**

* *If you wish to save the settings, execute the Save procedure (p. 59).*

* *When switching to User Styles (USER or CARD) that use a lot of memory, the message "No More Memory!" may be displayed, and in some cases, the data may not be played, even though it is recorded in the Form. In such situations, you can either switch to a Preset Song or a User Song that uses less memory, or you can enable play of all Forms by reducing Song or Style data.*
  Furthermore, be careful to note that in situations such as mentioned above, where you are unable to play previously recorded Forms, if you attempt a Style recording all the Forms could get overwritten.

Playing with Forms You Select Yourself

You can have a song played using Forms that you have selected.

* *When a Form is switched, the entire sequence of forms set for the Song is disabled. When [RESET] is pressed, the sequence of forms set for the Song is restored.*

1. **Press [FORM] ([INTRO] through [ENDING]) to select the first Form to be played.**
   If you select a form other than the currently selected form (for which the button is lit), the button will blink, and playback will pause.

2. **Press [START], and playback will begin with the currently selected form.**
   When the first-selected form finishes playing, playback will switch to the form that had been paused. The button will change from blinking (paused) to lit (playing).

3. **Press [FORM] (INTRO–ENDING) to switch the Form.**
   The form will change at the measure following the point where you pressed the button, and the button will change from blinking to lit.

- In the case of VERSE 1 and VERSE 2, the performance will continue repeating until playback switches to the next form.
- If you switch to either FILL 1, FILL 2, BREAK 1, or BREAK 2, playback will automatically switch to the previously-selected VERSE 1 or VERSE 2 when the performance ends.
- In the case of ENDING, you will return to the beginning of the song when playback ends.

* *When playback reaches the number of measures specified for the song, playback will stop and you will return to the beginning of the song.*

Playing with Chords You Enter Yourself

You can play a song using chords you enter yourself.

* *When you enter a chord, all the set chords in the song are deactivated. With performance halted, pressing [RESET] enables the song's set chord progression.*

While the Performance is Stopped

* *Pressing [RESET] returns you to the first measure; press [RWD] or [FWD] to move to the previous or following measure.*

1. **Press [CHORD], getting the button to light.**

2. **Use the following buttons to enter a chord.**

- Use [C] through [B] and [#/♭] to specify the root of the chord.
  Pressing [#/♭] repeatedly cycles through the selections of "#," "♭," and "none."

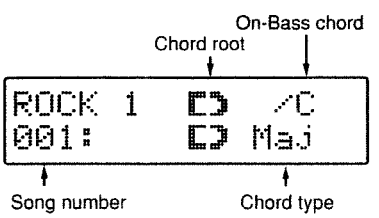
* *Depending on the root of the chord, the symbols that can be selected may differ.*

- Use [Maj] through [9th] to specify the chord type.
  When selecting a Chord Type other than [Maj] through [9th], press [CURSOR], making the display flash, then turn [VALUE] to select the chord type.

- - (N.C)	Maj	M7	M9
7	7b5	7(13)	7b9
7#9	6	69	m6
m69	9	add9	madd9
mM9	m	mM7	m7
m7b5	m9	dim	sus4
7sus4	aug	aug7	

- To specify an On-Bass chord, hold down [SHIFT] and use [C] through [B] and [#/♭] to specify the bass tone.

* *To eliminate an On-Bass chord, press [CURSOR] to get the On-Bass Chord indication to begin flashing, then turn [VALUE] so that "–" is selected.*



3. **When [START] is pressed, the performance begins with the input chord.**

4. **Input the chords as needed.**

* *You cannot select a chord type other than [Maj] through [9th] while the song is being played.*

When the Performance is in Progress

1. **Press [CHORD], getting the button to light.**
2. **Use the following buttons to enter a chord.**

- Use [C] through [B] and [#/♭] to specify the root of the chord.

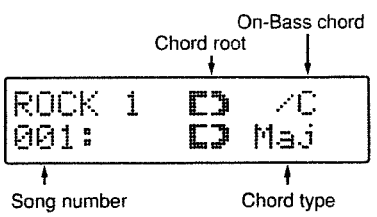
  Pressing [#/♭] repeatedly cycles through the selections of "#," "♭," and "none."

* *Depending on the root of the chord, the symbols that can be selected may differ.*

- Use [Maj] through [9th] to specify the chord type.

* *You cannot select a chord type other than [Maj] through [9th] while the song is being played.*

- To specify an On-Bass chord, hold down [SHIFT] and use [C] through [B] and [#/♭] to specify the bass tone.



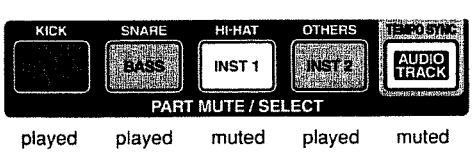
3. **Repeat step 2 as necessary.**

Muting Out the Sound of a Specific Part

You can mute out any of the parts (Drum, Base, Inst 1, or Inst 2) or the Audio Track when playing a song.

1. **Press one of the PART MUTE/SELECT buttons ([DRUM] through [INST 2]) to make the button go dark.**

   When the button is dark, the sound is muted. When the button is lighted, the sound plays.



2. **To cancel muting, press the corresponding button to make it light up.**

* *If you wish to save the settings, execute the Save procedure (p. 59).*

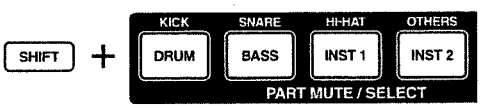
Muting Out a Specific Percussion Sound

You can mute out just the sound of a specific percussion instrument (such as snare) among the drum sounds used for the Drum Part.

* *This feature cannot be used when the Drum Part is muted (that is, when the button is dark).*

1. **Hold down [SHIFT] and press the button corresponding to the percussion sound you want to mute out ([DRUM] through [INST 2]) to make the button go dark.**

   When the button is dark, the sound is muted. When the button is lighted, the sound plays.



[SHIFT] + [DRUM]: Kick (KICK)
[SHIFT] + [BASS]: Snare (SNARE)
[SHIFT] + [INST 1]: Hi-hat (HI-HAT)
[SHIFT] + [INST 2]: Everything other than kick, snare, and hi-hat (OTHERS)

MEMO

You can check which percussion sounds are muted out by holding down [SHIFT] to see which buttons are lighted or dark.

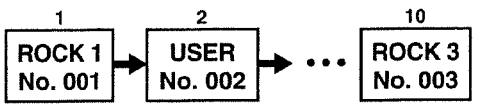
2. **To cancel muting, hold down [SHIFT] and press the corresponding button to make it light up.**

* *If you wish to save the settings, execute the Save procedure (p. 59).*

Playing More Than One Song Continuously (Song Chain)

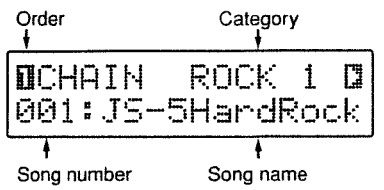
You can have up to ten songs played back to back in a performance. This function is called Song Chain.

* *You can combine User Songs in the unit and on a memory card for continuous play.*



1. **At the Song screen, press [CURSOR ►] to select "5 SONG CHAIN MODE."**

2. **Press [ENTER].**
   The Song Chain Setting screen appears.

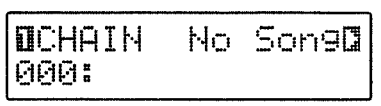


3. **Select the songs to be played consecutively, and the order in which you want them to play.**

- Press [CURSOR] to set the order of the songs (from 1 up to 10).
- Press [SONG/STYLE BANK] and select a category.
- Turn [VALUE] to select the Song Number.
- If you press [ERASE] ([SHIFT] + [UTILITY]), the currently-displayed song will be canceled, and will become a blank. If you press [ERASE] while a blank is shown, the subsequent songs will be moved forward to fill the gap.
- If you press [INSERT] ([SHIFT] + [PART]), a blank will be inserted. If you insert a blank when ten songs are already specified, the tenth song will be canceled.

* *To cancel, press [EXIT].*

* *The following appears when no song is selected.*



4. **When you've finished making the settings, press [CURSOR ◄] to return the orderof songs to "1," then press [RESET].**

5. **Press [START].**
   The Song Chain plays in the set order, beginning with the initial song selection. The display will change, showing the next song, as each successive song in the chain begins playing.

* *When a screen other than the Song Chain settings screen is displayed, the Song Chain function is disabled, and a consecutive performance cannot be played.*

* *There may be a slight pause until the next song starts.*

HINT

By pressing [SHIFT] + [SONG] in the Song screen, you can jump to the Song Chain setting screen.

Jumping to the last measure of the song

You can jump to the last measure of the currently selected song.

1. **With song playback stopped, press [SHIFT] + [FWD].**
   The last measure will appear in the left display.

Chapter 3 Composing Songs Using EZ Compose

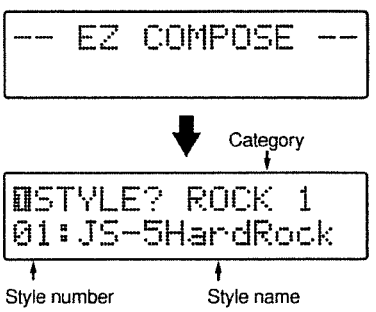
Using EZ Compose makes it easy to create your own original songs.

1. Select a User Song to be recorded (p. 59).

* *If no card is inserted, you can't select a User Song on a card.*

2. Press [EZ], getting the button to light.

The Start screen for EZ Compose appears for about one second, and then the Style Selection screen appears.



MEMO

To cancel EZ Compose, press [EZ] to make the button go dark.

3. Press [SONG/STYLE BANK] and select a category.

4. Turn [VALUE] to select a Style.

* *When you press [START], the Style is played using the Forms selected at that time.*

5. Once you've decided on the Style, press [ENTER].

The Chord template Selection screen appears.

6. Turn [VALUE] to select a Chord template.

A **Chord template** groups the chord progressions and Form sequences together into a single set.

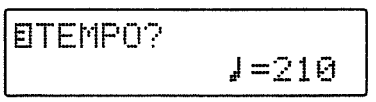
BluesChord 1–9: Selected when creating songs with blues chord progressions.

MajorChord 1–24: Selected when creating songs consisting of major melodies.

MinorChord 1–17: Selected when creating songs consisting of minor melodies.

7. Once you've decided on a Chord template, press [ENTER].

The Tempo Setting screen appears.

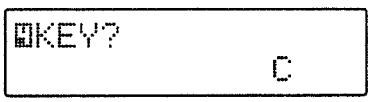


8. Turn [VALUE] to set the tempo.

Settings values: 40–250

9. Once you've decided on the tempo, press [ENTER].

The Key Setting screen appears.

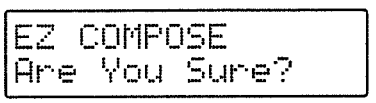


10. Turn [VALUE] to specify the key (root) of the song.

You can specify a key from C to B, in semitone steps.

11. Once you've decided on the key of the song, press [ENTER].

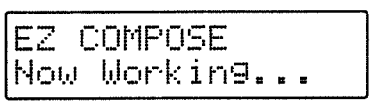
A screen asking you to confirm that you want to proceed with EZ Compose appears.



* *To cancel, press [EXIT].*

12. Press [ENTER] to carry out EZ Compose.

Generation of the song data starts.



When the song data has been generated, the display will indicate "Completed!"

* *The song that is generated will automatically be given a song name that is the same as the Chord template.*

Chapter 4 Creating User Songs

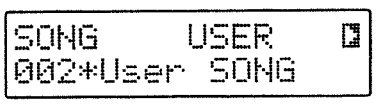
NOTE

Never turn off the power to the JS-5 or remove the memory card from the JS-5 while the " 🗀 " still appears at the left of the display (when data is being written), as this can prevent the data from being written properly, and may adversely affect later operations.

Selecting the Recording Destination

Select the User Song to be used as the recording destination.

1. **Press [SONG], getting the button to light.**
2. **Press [USER] or [CARD], to switch to "USER" (the JS-5) or "CARD" (memory card).**
   * *If no memory card is inserted, then you can't select "CARD" even when you press [CARD].*
3. **Turn [VALUE] to select a song.**



* *A User Song where no data is recorded will have an "*" next to the song number.*

Selecting a Style

1. **Press [STYLE], getting the button to light.**

2. **Press [SONG/STYLE BANK] and select a category.**
   * *You can't select User Styles stored on memory cards if no card is inserted.*
3. **Turn [VALUE] to select a Style.**

■ When you press [START], the Style is played using the Forms selected at that time.

You can check the tempo for the selected Style as well as during recording.

When you have finished checking the tempo, press [STOP] to stop the performance, then press [RESET].

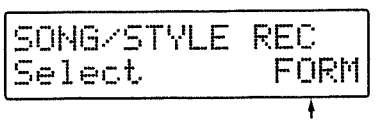
■ If the tempo is too fast (or slow), use the following procedure to change the tempo.

1) Press [TEMPO], getting the button to light.
2) Turn [VALUE] to set the tempo.
3) Once you've decided on the tempo, press [TEMPO] once more, extinguishing the button's light.

Selecting a recording track

When There is No Data in the Recording Destination

1. **Press [REC], getting the button to light.**
   [SONG], [CHORD], and [AUDIO TRACK] flash, and the Recording Track Selection screen appears.

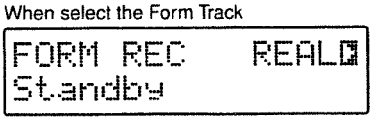


Recording Track

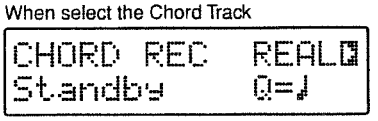
* *When a User Style is selected, [STYLE] flashes.*

2. **Press [SONG] or [CHORD] to select a recording track.**
   [SONG]: Form track
   [CHORD]: Chord track
3. **Press [ENTER].**
   The Recording Standby screen for the selected track appears.

When select the Form Track

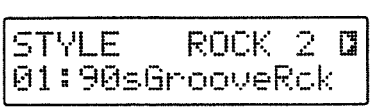


When select the Chord Track



Use the following procedure when changing Styles.

1. **Press [CURSOR ►] to display the Style Selection screen.**



2. **Press [SONG/STYLE BANK] and select a category.**
   * *You can't select User Styles stored on memory cards if no card is inserted.*

3. Turn [VALUE] to select a Style.

* *While you are taking these procedures, you cannot play the Style you select.*

4. Press [SONG] or [CHORD] to return to Recording Standby screen.

Recording Forms

Record Forms to the Form Track. There are two methods for this, Realtime Recording and Step Recording.

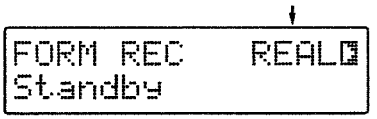
Realtime Recording

MEMO

Form is recorded in units of one measure.

1. Display the Form's Recording Standby screen (p. 66).
[REC] and [SONG] lights up.

2. Press [REC] to display "REAL."
Realtime Recording is selected.

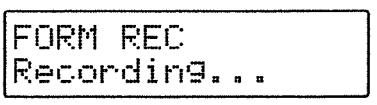


If you press [CURSOR ►] to select "1 COUNT IN," you can make count-in settings. (p. 60)

3. Press [FORM] to select the first Form to be recorded.
The button for the selected Form lights up.

4. Press [START].
The Form's Realtime Recording screen is displayed, and recording begins. [REC] lights up.

* *When the count-in is selected, the count-in is indicated in the left display while the count sound plays simultaneously. After the count-in is displayed, recording begins.*



* *If the next form is not selected when the "Intro" is first recorded, verse 1 will automatically play when the intro finishes, and [VERSE 1] will light.*

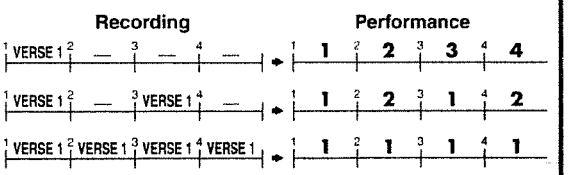
5. Press [FORM] in the sequence of the Forms.

- The current Form continues to play until you switch to the next form. If a Form is already recorded, that Form will be played.
- When you press [ENDING], then the recording stops automatically when the ending is finished playing, and you're returned to the Song screen.

HINT

You can change the content of a performance, even in the same Forms, by using different recording methods.

For example, when recording a Form consisting of four measures, you can have the content change with the recording method as shown below.



6. Once you have finished recording, press [STOP].
[REC] goes dark, and the Song screen reappears.

HINT

Timing of Pressing the Buttons

If you press the button for the subsequent Form slightly before the currently selected Form is through playing, the button flashes (for standby). The next Form starts playing at the same time performance of the current Form stops, and the button changes from flashing to lit.

HINT

If you wish to create a silent portion, record [BREAK 2].

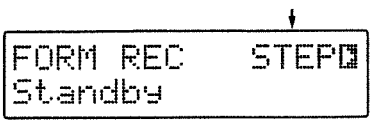
Step Recording

MEMO

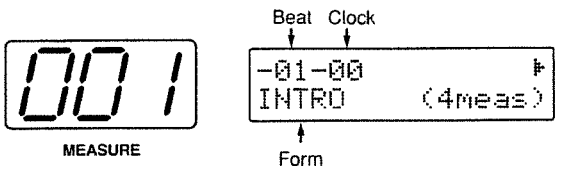
Form is recorded in units of one measure.

1. **Display the Form's Recording Standby screen (p. 66).**
   [REC] and [SONG] lights up.

2. **Press [REC] to display "STEP."**
   Step Recording is selected.

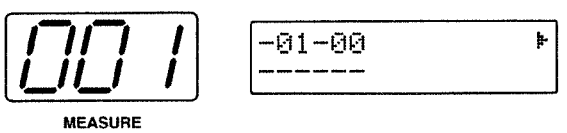


3. **Press [START].**
   The Form's Step Recording screen is displayed, and recording begins.



MEMO

When "- - - - - -" is indicated for the Form, it means that the Form is not being recorded with that timing. When the song is played, the preceding Form that was recorded is carried over.



4. **Move to the measure to be used in recording the Form.**

■ Press [FWD] to move to the next measure, Press [RWD] to move to the previous measure.

5. **Press [FORM] to record the Forms.**
   The Form screen for the Form being recorded appears.

The number of measures comprising the Form being recorded is displayed in the parentheses at the lower right of the screen.
For example, when "4meas" is displayed, it indicates that the current Form is made up of four measures.

You can have a recorded data play by pressing [START] while Step Recording is in progress. The measure currently being played appears in the left display.

* *You cannot proceed with recording while the data is being played.*

When the last Form is played, the performance stops, and performance returns to the beginning position, and then is enabled for recording.

* *To stop a performance in progress, press [STOP]. The performance returns to the beginning position, then is enabled for recording.*

6. **Move to the timing (measure/beat/clock) to be used in recording the next Form.**

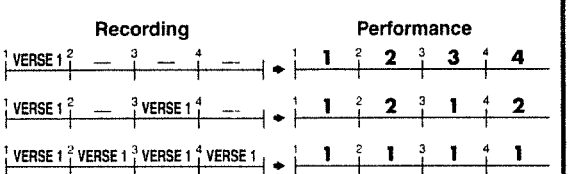
7. **Repeat Steps 5 and 6 as needed.**

■ Press [FWD] while holding down [SHIFT] to move to the recording Quantize value used in the subsequent Form; press [RWD] while holding down [SHIFT] to move to the recording Quantize value used in the previous Form.

HINT

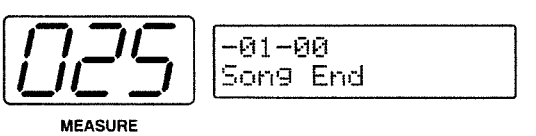
You can change the content of a performance, even in the same Forms, by using different recording methods.

For example, when recording a Form consisting of four measures, you can have the content change with the recording method as shown below.



If the form is displayed as "Song End," no form has been recorded after this measure.

If you move to a measure that comes after this measure and press [STOP], then even without any Form being recorded, the measures up to the one in which [STOP] has been pressed become the measures to be recorded, and "Song End" appears for the measure following this.



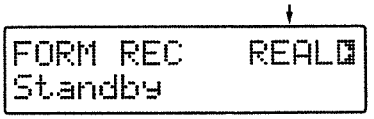
For measures earlier than this measure, a " ⊩ " will be displayed in the upper right of the screen.

8. **Once you have finished recording, press [STOP].**
   [REC] goes dark, and the Song screen reappears.

Adding Fill-ins and Breaks

Use the following procedure to add fill-ins and breaks after recording.

1. **Display the Form's Recording Standby screen (p. 66).**
   [REC] and [SONG] lights up.
2. **Press [REC] to display "REAL."**
   Realtime Recording is selected.

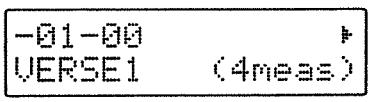


3. **Press [START].**
   The Form's Realtime Recording screen is displayed, and recorded Form is played.
4. **Press [FILL 1] or [FILL 2], or [BREAK 1] or [BREAK 2] in time with the recording.**
5. **Once you have finished recording, press [STOP].**
   [REC] goes dark, and the Song screen reappears.

Erasing Forms

You can erase the recorded Form in the current screen.
After the Form is erased, "-----" is displayed for the Form, and the previous Form is carried forward (p. 68).

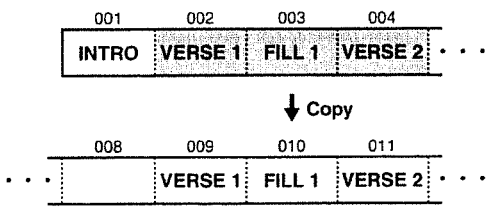
1. **Display the Form's Step Recording screen (p. 66).**



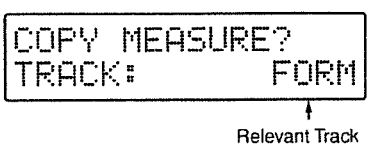
2. **Press [FWD] or [RWD] to show the Form you want to erase.**
3. **Press [ERASE] ([SHIFT] + [UTILITY]).**

Copying Forms

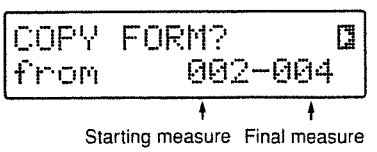
This copies the Forms in a specified range of measures and copies them to other measures on the same track.



1. **At the Form's Step Recording screen, press [COPY] ([SHIFT] + [EFFECTS]).**
   The screen for selecting the track to copy appears.

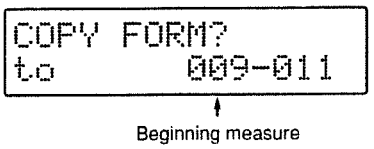


2. **Turn [VALUE] to select "FORM."**
3. **Press [ENTER].**
   The copy-destination designation screen appears.



4. **Specify the range of measures in the copy source.**
   Use [CURSOR] and [VALUE] to specify the starting measure and final measure.

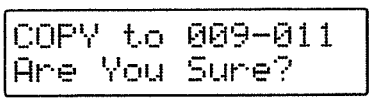
5. **Press [ENTER].**
The copy-destination designation screen appears.



* *To cancel, press [EXIT]. The Form's Step Recording screen reappears.*

6. **Specify the measure for the copy destination.**
Turn [VALUE] to specify the starting measure. The final measure is determined automatically by the number of measures in the copy source.

7. **Press [ENTER].**
The copy confirmation screen appears.



* *To cancel, press [EXIT]. The copy-destination screen reappears.*

8. **Press [ENTER] when you want to execute the copy.**
The copy will be executed, and when it is finished the display will indicate "Completed!"

Recording the Chord Progression

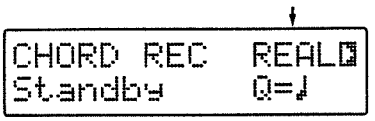
Record chord progressions to the Chord Track. There are two methods for this, Realtime Recording and Step Recording.

* *Use Step Recording to input Octave Shift (p. 72) and on-bass chords.*

Realtime Recording

1. **Display the Chord's Record Standby screen (p. 66).**
[REC] and [CHORD] lights up.

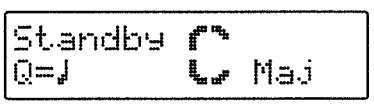
2. **Press [REC] to display "REAL."**
Realtime Recording is selected.



3. **Use [CURSOR] and [VALUE] to set Quantize.**
The **Quantize** here corrects discrepancies in the timing during recording of fill-ins and breaks, with the timing set to the selected note length.

Display	Quantize (Clock)		Display	Quantize (Clock)	
𝅝	Whole note	(384)	♩3	Quarter note triplets	(64)
𝅗𝅥	Half note	(192)	♪	8th note	(48)
𝅗𝅥3	Half note triplets	(128)	♪3	8th note triplets	(32)
♩	Quarter note	(96)	𝅘𝅥𝅯	16th note	(24)

4. **Before you start, input the first chord that you wish to record.**
When you input the chord, the following screen will appear.



* *When you press [EXIT], you will return to the record standby screen. However if this screen is not displayed, it is not possible to begin recording from the chord you input.*

■ Use [C] through [B] and [#/b] to specify the root of the chord.
Pressing [#/b] repeatedly cycles through the selections of "#," "b," and "none."

* *Depending on the root of the chord, the symbols that can be selected may differ.*

- Use [Maj] through [9th] to specify the chord type.

* *You cannot select a chord type other than [Maj] through [9th].*

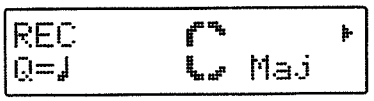
- To specify an On-Bass chord, hold down [SHIFT] and use [C] through [B] and [#/b] to specify the bass tone.

If you press [CURSOR ►] to select "1 COUNT IN," you can make count-in settings. (p. 60)

5. Press [START].

The Chord's Realtime Recording screen is displayed. The Form being recorded begins to play, and recording begins with the Chord input at Step 4.

* *When the count-in is selected, the count-in is indicated in the left of the display while the count sound plays. After the count-in is displayed, recording begins.*



6. Record the next Chord.

- Use [C] through [B] and [#/b] to specify the root of the chord.
- Use [Maj] through [9th] to specify the chord type.

To input both the chord root and type, press both buttons simultaneously.

For example if you wish to record "CMaj" after "E7th," press [C] and then press [Maj] to record "C7th" and "CMaj."

* *You cannot select a chord type other than [Maj] through [9th] while the song is being played.*

7. Repeat Step 6 as needed.

8. Once you have finished recording the Chord, press [STOP].

[REC] goes dark, and the Chord screen appears.

* *Press [SONG] to display the song screen.*

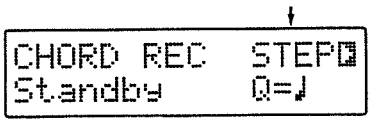
Step Recording

1. Display the Chord's Record Standby screen (p. 66).

[REC] and [CHORD] lights up.

2. Press [REC] to display "STEP."

Step Recording is selected.



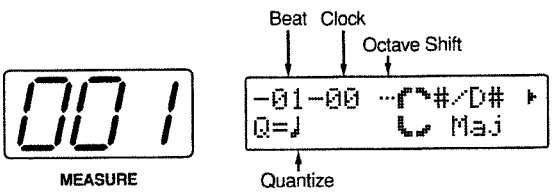
3. Use [CURSOR] and [VALUE] to set the Quantize.

The **Quantize** here sets the timing to the selected note length of the subsequent step when [FWD] or [RWD] is pressed in later operations.

Display	Quantize	Display	Quantize
𝅝	Whole note	♩3	Quarter note triplets
𝅗𝅥	Half note	♪	8th note
𝅗𝅥3	Half note triplets	♪3	8th note triplets
♩	Quarter note	𝅘𝅥𝅯	16th note

4. Press [START].

The Chord's Step Recording screen is displayed, and recording begins. [REC] lights up.



5. Move to the timing (measure/beat/clock) to be used in recording the Chord.

- Press [FWD] to set the Quantize so that the timing is synchronized to the subsequent step; Press [RWD] to synchronize the timing to the previous step.

* *You can change the Quantize value by pressing [CURSOR] and then turning [VALUE] to make the Quantize display flash.*

6. Record the Chord.

- Use [C] through [B] and [#/b] to specify the root of the chord.

  Pressing [#/b] repeatedly cycles through the selections of "#," "b," and "none."

* *Depending on the root of the chord, the symbols that can be selected may differ.*

■ Use [Maj] through [9th] to specify the chord type.

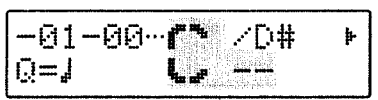
When selecting a Chord Type other than [Maj] through [9th], press [CURSOR], making the display flash, then turn [VALUE] to select the chord type.

- - (N.C)	Maj	M7	M9
7	7b5	7(13)	7b9
7#9	6	69	m6
m69	9	add9	madd9
mM9	m	mM7	m7
m7b5	m9	dim	sus4
7sus4	aug	aug7	

■ To specify an On-Bass chord, hold down [SHIFT] and use [C] through [B] and [#/b] to specify the bass tone.

* *To eliminate an On-Bass chord, press [CURSOR] to get the On-Bass Chord indication to begin flashing, then turn [VALUE] so that "–" is selected.*

■ When recording Non-Chord Types, press [CURSOR] to make the Chord Type display flash, and turn [VALUE] to select "- -."



Non-chord type

N.C. (Non-Chord Type)

Select this type when you want to have the original performance data played as is, with no conversion of the chords.

Since the "Intro" and "Ending" Chord Progressions are included in the original performance data, you can have the Chord Progressions in the performance data played as is by specifying Non-Chord Type.

Normally, when the Chord Type with a root of "C" is changed to "N.C.," the performance data is played with no conversion of the chords.

If the root is a note other than "C," the original performance data is played based on that root. For example, when "D" is selected with Non-Chord Type, the original performance data is played a whole step up from the original data.

7. Set the chord's Octave Shift as needed.

When setting the **Octave Shift**, you can have the sound of the chord play one octave higher or lower.

Use [CURSOR] and [VALUE] to display the symbols below.

▲: Up to the next higher inversion.

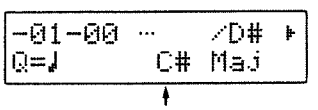
•••: Basic chord (root at bottom).

▼: Down to the next lower inversion.

* *Chord Octave Shift can be set only in the Step Recording screen.*

8. Move to the timing (measure/beat/clock) to be used in recording the next Chord.

MEASURE



MEMO

When the Chord root is displayed in a smaller size, it indicates that a previously recorded chord has been carried forward.

9. Repeat Steps 5–8 as needed.

■ Press [FWD] while holding [SHIFT] down to move to the measure where the next chord is recorded, and press [RWD] while holding [SHIFT] down to move to the measure where the previous chord is recorded.

If the " ⊫ " is no longer displayed in the upper right of the screen, this means that chords are not recorded in subsequent measures.

You can have a recorded data play by pressing [START] while Step Recording is in progress. The measure currently being played appears in the left display.

* *You cannot proceed with recording while the data is being played.*

When the last Form is played, the performance stops, and performance returns to the beginning position, and then is enabled for recording.

* *To stop a performance in progress, press [STOP]. The performance returns to the beginning position, then is enabled for recording.*

10. Once you have finished recording the Chord, press [STOP].

[REC] goes dark, and the Chord screen reappears.

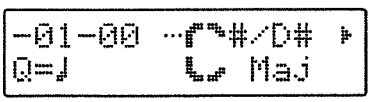
* *Press [SONG] to display the song screen.*

Erasing Chords

You can erase the recorded Chord in the current screen.

After the Chord is erased, the previous Chord is carried forward.

1. **Display the Chord's Step Recording screen (p. 66).**

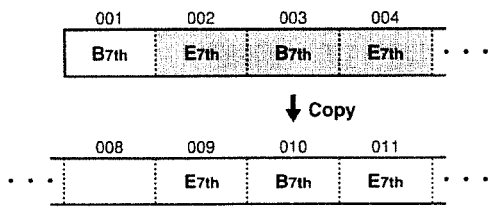


2. **Use [FWD] or [RWD] to show the Chord you want to erase.**

3. **Press [ERASE] ([SHIFT] + [UTILITY]).**

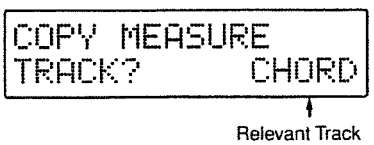
Copying Chords

This copies the Chords in a specified range of measures and copies them to other measures on the same track.



1. **At the Chord's Step Recording screen, press [COPY] ([SHIFT] + [EFFECTS]).**

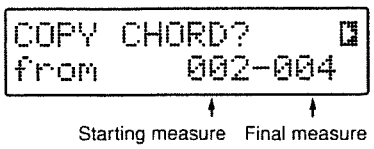
The screen for selecting the track to copy appears.



2. **Turn [VALUE] to select "CHORD."**

3. **Press [ENTER].**

The copy-source designation screen appears.

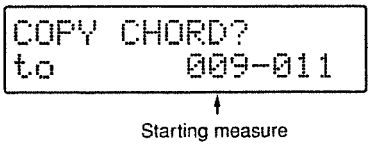


4. **Specify the range of measures in the copy source.**

Use [CURSOR] and [VALUE] to specify the starting measure and final measure.

5. **Press [ENTER].**

The copy-destination designation screen appears.

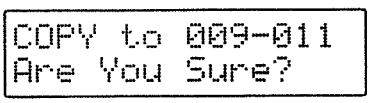


6. **Specify the measure for the copy destination.**

Turn [VALUE] to specify the starting measure. The final measure is determined automatically by the number of measures in the copy source.

7. **Press [ENTER].**

The copy confirmation screen appears.



* *To cancel, press [EXIT]. The copy-destination screen reappears.*

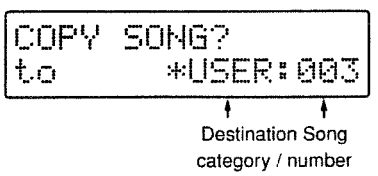
8. **Press [ENTER] when you want to execute the copy.**

The copy will be executed, and when it is finished the display will indicate "Completed!"

Using a Preset Song as a Base for Creating a New Song

When creating a User Song by editing a Preset Song, since you cannot edit the Preset Song itself, copy the Preset Song to the User Songs.

1. **Select the Preset Song to be used as the copy source.**
2. **Press [COPY] ([SHIFT] + [EFFECTS]).**
   The copy-source designation screen appears.



3. **Select the User Song to be used as the copy destination.**

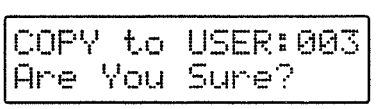
- Use [CURSOR] and [VALUE] to select "USER" (the JS-5) or "CARD" (memory card).

* *If no memory card is inserted, then you can't select "CARD" even when you press [CARD].*

- Use [CURSOR] and [VALUE] to select the Song number.

* *User Songs with no data recorded in them are indicated by an "*" in the display.*

4. **Press [ENTER].**
   The copy confirmation screen appears.



* *To cancel, press [EXIT]. The* copy-source designation *screen reappears.*

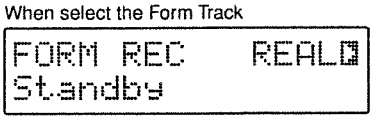
5. **When you have decided on the copy destination, press [ENTER].**
   The copy will be executed, and when it is finished the display will indicate "Completed!"

Naming the Song

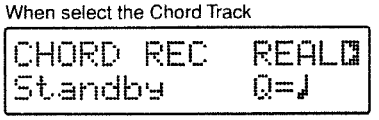
You can give the song a song name.

1. **Select the User Song to be named.**
2. **Press [REC].**
   The Recording Track Selection screen is displayed.
3. **Press [SONG] or [CHORD].**
   The Form or Chord Record Standby screen appears.

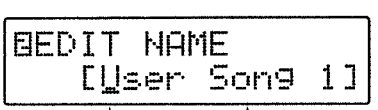
When select the Form Track



When select the Chord Track



4. **Press [CURSOR ►] to select "2 EDIT NAME."**
   The Song Name input screen appears.



5. **Use [CURSOR] and [VALUE] to input the characters.**

- If you press [SHIFT] + [◄], the cursor will move to the beginning of the name.
- If you press [SHIFT] + [►] , the cursor will move to the end of the name.
- If you press [INSERT] ([SHIFT] + [PART]), a space will be inserted at the cursor location.
- If you press [ERASE] ([SHIFT] + [UTILITY]), the character at the cursor location will be deleted, and subsequent characters will be moved toward the left to fill the gap.
- If you hold down [SHIFT] and turn [VALUE], uppercase / lowercase / symbols / (space) / numerals will be displayed.

6. **Repeat Step 5 as needed.**

* *Press [EXIT] to return to the Form or Chord Record Standby screen.*

7. **To end the procedure, press [STOP].**

Chapter 5 Editing Songs

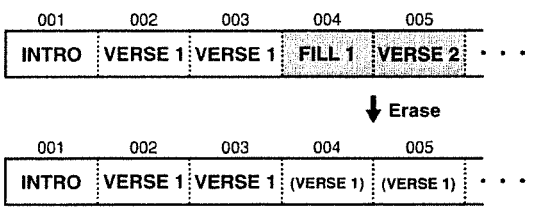
NOTE

Never turn off the power to the JS-5 or remove the memory card from the JS-5 while the " ▢ " still appears at the left of the display (when data is being written), as this can prevent the data from being written properly, and may adversely affect later operations.

Erasing Forms

You can erase Forms in a specified range of measures. This erases only the data, leaving the measures intact.

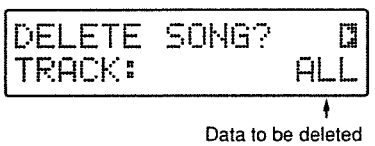
After the Form is erased, "- - - - - -" is displayed for the Form, and the previous Form is carried forward (p. 68).



1. **Select the User Song whose Form you wish to erase.**

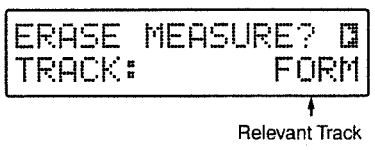
2. **While play is stopped, press [ERASE] ([SHIFT] + [UTILITY]).**

   The Song Delete screen appears.



3. **Press [CURSOR ►] to select "ERASE MEASURE?"**

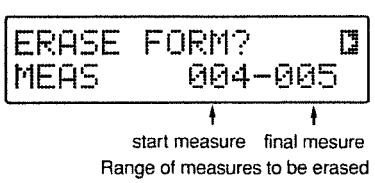
   The screen for selecting the track to erase appears.



4. **Turn [VALUE] to select "FORM."**

5. **Press [ENTER].**

   The Form erase screen appears.



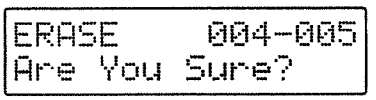
6. **Specify the range of measures to be erased.**

   Use [CURSOR] and [VALUE] to specify the starting measure and final measure.

   * *The specified final measure cannot come before the starting measure.*

7. **Once you've decided on the measures to be erased, press [ENTER].**

   The Form erase confirmation screen appears.



   * *To cancel, press [EXIT]. The Form erase screen reappears.*

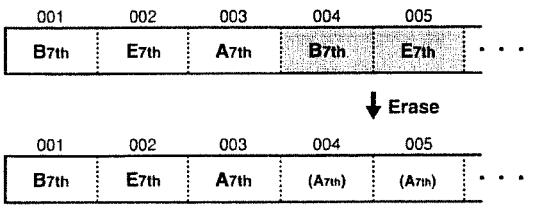
8. **Press [ENTER] to erase the Form.**

   The erase will be executed, and when it is finished the display will indicate "Completed!"

Erasing Chords

You can erase the recorded Chord in a specified range of measures. This erases only the data, leaving the measures intact.

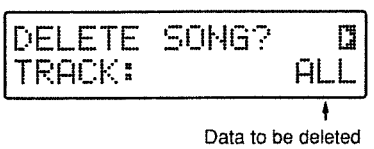
After the Form is erased, the previous Chord is carried forward (p. 72).



1. **Select the User Song whose Chord you wish to erase.**

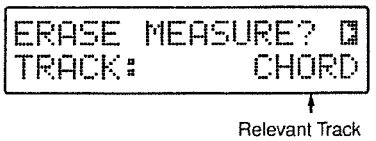
2. **While play is stopped, press [ERASE] ([SHIFT] + [UTILITY]).**

   The Song Delete screen appears.



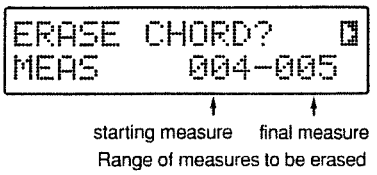
3. **Press [CURSOR ►] to select "ERASE MEASURE?"**

   The screen for selecting the track to erase appears.



4. **Turn [VALUE] to select "CHORD."**

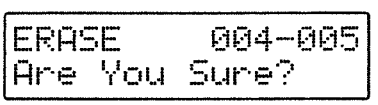
5. **Press [ENTER].**
   The Chord erase screen appears.



6. **Specify the range of measures to be erased.**
   Use [CURSOR] and [VALUE] to specify the starting measure and final measure.

   * *The specified final measure cannot come before the starting measure.*

7. **Once you've decided on the measures to be erased, press [ENTER].**
   The Chord erase confirmation screen appears.

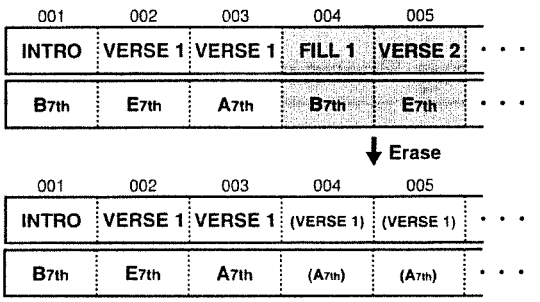


   * *To cancel, press [EXIT]. The Chord erase screen screen reappears.*

8. **Press [ENTER] to erase the Chord.**
   The erase will be executed, and when it is finished the display will indicate "Completed!"

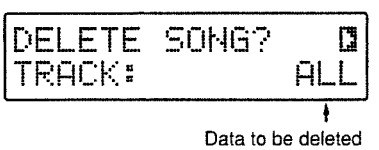
Erasing Forms Together with Chords

You can erase both the Forms and the Chords in a specified range of measures. This erases only the data, leaving the measures intact.

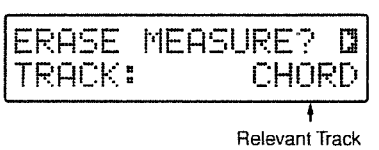

001 002 003 004 005
INTRO VERSE 1 VERSE 1 FILL 1 VERSE 2
B7th E7th A7th B7th E7th
Erase
001 002 003 004 005
INTRO VERSE 1 VERSE 1 (VERSE 1) (VERSE 1)
B7th E7th A7th (A7th) (A7th)

1. **Select the User Song whose Form and Chord you wish to erase.**

2. **While play is stopped, press [ERASE] ([SHIFT] + [UTILITY]).**
   The Song Delete screen appears.

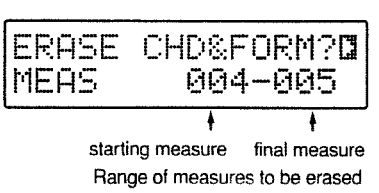


3. **Press [CURSOR ►] to select "ERASE MEASURE?"**
   The screen for selecting the track to erase appears.



4. **Turn [VALUE] to select "CHD&FORM."**

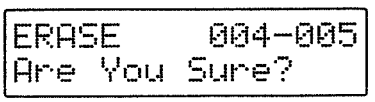
5. **Press [ENTER].**
   The screen for simultaneously erasing Forms and Chords appears.



6. Specify the range of measures to be erased.
Use [CURSOR] and [VALUE] to specify the starting measure and final measure.

* *The specified final measure cannot come before the starting measure.*

7. Once you've decided on the measures to be erased, press [ENTER].
The erase confirmation screen appears.

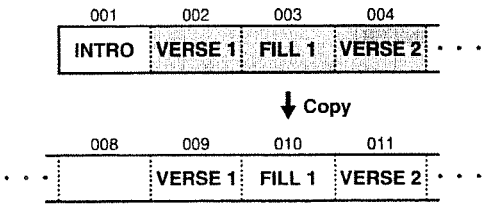


* *To cancel, press [EXIT]. The screen for simultaneously erasing Forms and Chords appears.*

8. Press [ENTER] to erase the data.
The erase will be executed, and when it is finished the display will indicate "Completed!"

Copying Forms

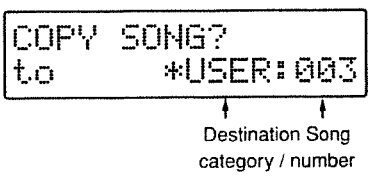
This copies the Forms in a specified range of measures and copies them to other measures on the same track.



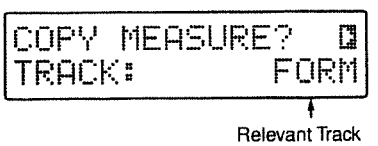
* *By copying measures in which no Form has been recorded (measures in which a Form recorded in even earlier measures are passed on), you can make blank measures in the copy destination.*

1. Select the User Song whose Form you wish to copy.

2. While play is stopped, press [COPY] ([SHIFT] + [EFFECTS]).
The Song copy screen appears.

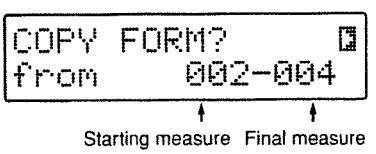


3. Press [CURSOR ►] to select "COPY MEASURE?"
The screen for selecting the track to copy appears.



4. Turn [VALUE] to select "FORM."

5. Press [ENTER].
The copy-source designation screen appears.

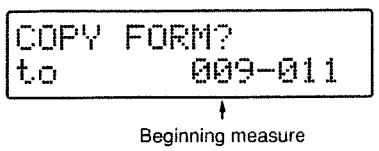


6. Specify the range of measures in the copy source.
Use [CURSOR] and [VALUE] to specify the starting measure and final measure.

* *When attempting to copy many measures at one time, the message "No More Memory!" may be displayed, and you may not be able to copy the data. In this case, you can copy the data by dividing the measures to be copied into smaller sections, and repeating the copy procedure as many times as is needed.*

7. Press [ENTER].

The copy-destination designation screen appears.

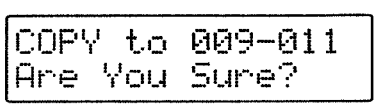


8. Specify the measure for the copy destination.

Turn [VALUE] to specify the starting measure. The final measure is determined automatically by the number of measures in the copy source.

9. Press [ENTER].

The copy confirmation screen appears.



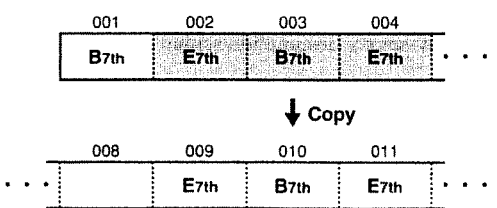
* *To cancel, press [EXIT]. The copy-destination designation screen reappears.*

10. Press [ENTER] when you want to execute the copy.

The copy will be executed, and when it is finished the display will indicate "Completed!"

Copying Chord Progression

This copies the Chords in a specified range of measures and copies them to other measures on the same track.

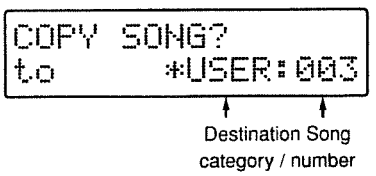


* *By copying measures in which no Chord has been recorded (measures in which a Chord recorded in even earlier measures are passed on), you can make blank measures in the copy destination.*

1. Select the User Song whose chord progression you wish to copy.

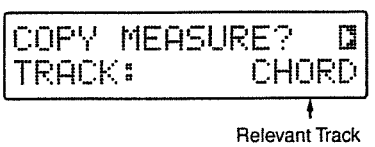
2. While play is stopped, press [COPY] ([SHIFT] + [EFFECTS]).

The Song copy screen appears.



3. Press [CURSOR ►] to select "COPY MEASURE?"

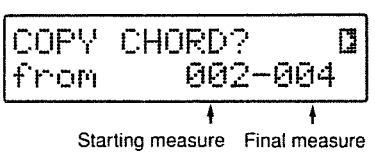
The screen for selecting the track to copy appears.



4. Turn [VALUE] to select "CHORD."

5. Press [ENTER].

The copy-source designation screen appears.

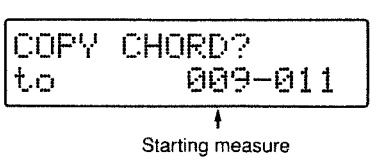


6. Use [CURSOR] and [VALUE] to specify the starting measure and final measure of the copy source.

* *When attempting to copy many measures at one time, the message "No More Memory!" may be displayed, and you may not be able to copy the data. In this case, you can copy the data by dividing the measures to be copied into smaller sections, and repeating the copy procedure as many times as is needed.*

7. Press [ENTER].

The copy-destination designation screen appears.

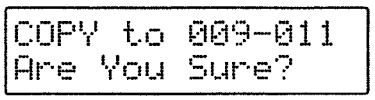


8. Specify the measure for the copy destination.

Turn [VALUE] to specify the starting measure. The final measure is determined automatically by the number of measures in the copy source.

9. Press [ENTER].

The copy confirmation screen appears.



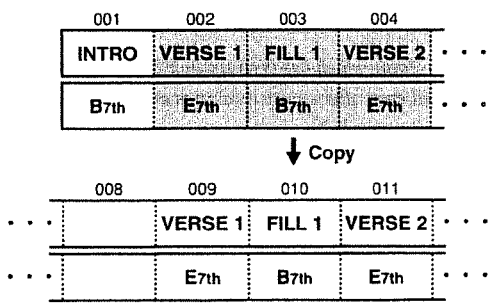
* *To cancel, press [EXIT]. The copy-destination designation screen reappears.*

10. Press [ENTER] to execute the copy.

The copy will be executed, and when it is finished the display will indicate "Completed!"

Copying Forms Together with Chords

This copies the both the Forms along with the Chords in a specified range of measures and copies them to other measures on the same track.

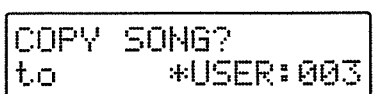


* *By copying measures in which no Form/Chord has been recorded (measures in which a Form/Chord recorded in even earlier measures are passed on), you can make blank measures in the copy destination.*

1. Select the User Song whose Form and Chord you wish to copy.

2. While play is stopped, press [COPY] ([SHIFT] + [EFFECTS]).

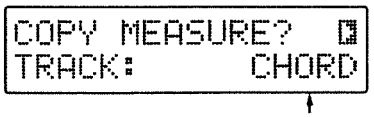
The Song copy screen appears.



Destination Song category / number

3. Press [CURSOR ►] to select "COPY MEASURE?"

The screen for selecting the track to copy appears.

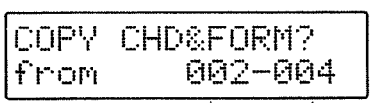


Relevant Track

4. Turn [VALUE] to select "CHD&FORM."

5. Press [ENTER].

The screen for simultaneously copying Forms and Chords appears.



Starting measure Final measure

6. Specify the range of measures in the copy source.

Use [CURSOR] and [VALUE] to specify the starting measure and final measure.

* *When attempting to copy many measures at one time, the message "No More Memory!" may be displayed, and you may not be able to copy the data. In this case, you can copy the data by dividing the measures to be copied into smaller sections, and repeating the copy procedure as many times as is needed.*

7. Press [ENTER].

The copy-destination designation screen appears.

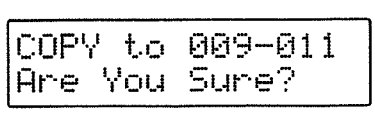
Starting measure

8. Specify the measure for the copy destination.

Turn [VALUE] to specify the starting measure. The final measure is determined automatically by the number of measures in the copy source.

9. Press [ENTER].

The copy confirmation screen appears.



* *To cancel, press [EXIT]. The copy-destination screen reappears.*

10. Press [ENTER] to execute the copy.

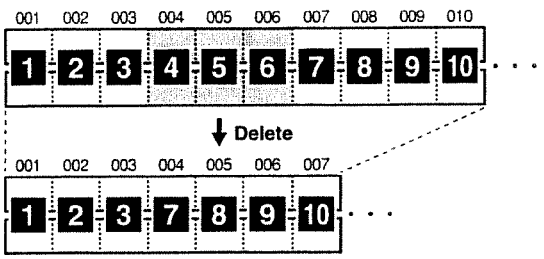
The copy will be executed, and when it is finished the display will indicate "Completed!"

Deleting Measures

This deletes the actual measures themselves, along with the Forms and Chords they contain, for a specified range of measures.

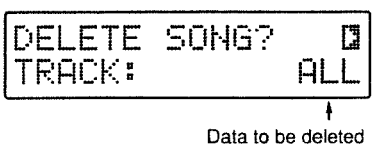
After the Measures are removed, subsequent measures are brought forward to close the gap created.

* *Even if you delete a measure of the Song where Audio data is recorded, there will be no change caused in the Audio data.*
* *The Loop Point which has been set in a Song will remain unchangedbe even after a measure is deleted. Set a new Loop Point as needed.*

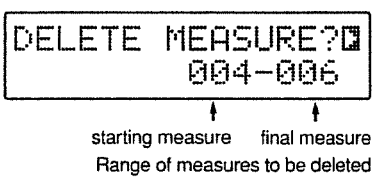


1. **Select the User Song whose measure you wish to delete.**

2. **While play is stopped, press [ERASE] ([SHIFT] + [UTILITY]).**
   The Song Delete screen appears.

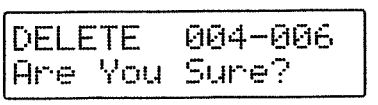


3. **Press [CURSOR ►] to select "DELETE MEASURE?"**
   The Measure delete screen appears.



4. **Specify the range of measures to be deleted.**
   Use [CURSOR] and [VALVE] to specify the starting measure and final measure.
   * *The specified final measure cannot come before the starting measure.*

5. **Once you've decided on the measures to be deleted, press [ENTER].**
   The delete confirmation screen appears.



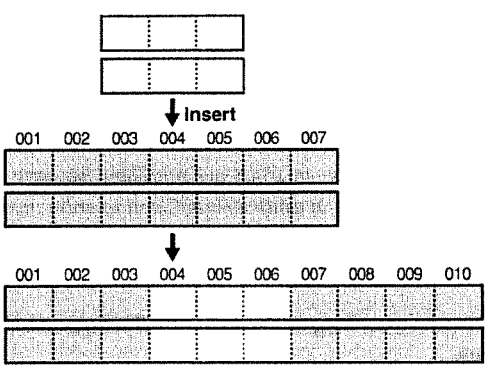
   * *To cancel, press [EXIT]. The Measure delete screen reappears.*

6. **Press [ENTER] to delete the data.**
   The delete will be executed, and when it is finished the display will indicate "Completed!"

Inserting Measures

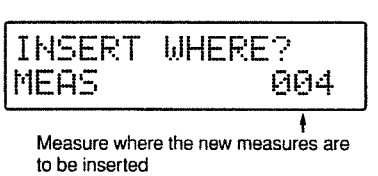
This inserts empty measures in the Form track and Chord track.

* *Even if you insert empty measures into the Song where Audio data is recorded, the Audio data will remain unchanged.*
* *The Loop Point which has been set in a Song will remain unchanged even after empty measures are inserted. Set a new Loop Point as needed.*



1. **Select the User Song whose empty measure you wish to insert.**

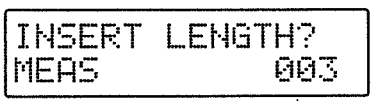
2. **While play is stopped, press [INSERT] ([SHIFT] + [PART]).**
   The confirmation screen for inserting measures appears.



3. **Turn [VALUE] to select the measure where the new measures are to be inserted.**

4. **Once you've decided on the insertion point, press [ENTER].**

   The Measure insert designation screen appears.

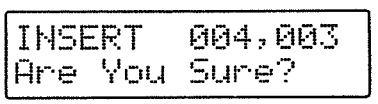


Number of measures to be inserted

5. **Turn [VALUE] to specify the number of measures to be inserted.**

6. **Once you've decided on the number of measures, press [ENTER].**

   The confirmation screen for inserting measures appears.



* *To cancel, press[EXIT]. The Measure insert designation screen reappears.*

7. **To insert the measures, press [ENTER].**

   The insert will be executed, and when it is finished the display will indicate "Completed!"

Deleting an Entire Song/Deleting the Data on a Specified Track

This deletes an entire User Song. The data on the Audio track (the audio data) and Song name are also deleted.

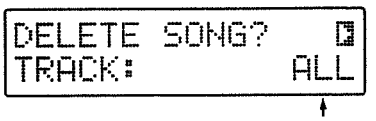
You can also delete data only from the "Form track," "Chord track," or "Audio track."

1. **Select the User Song to be deleted).**

* *You cannot select User Songs stored on memory cards if no card is inserted.*

2. **While play is stopped, press [ERASE] ([SHIFT] + [UTILITY]).**

   The Song Delete screen appears.



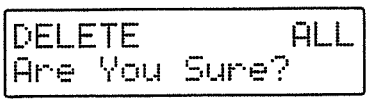
Data to be deleted

3. **Turn [VALUE] to select the data to be deleted.**

ALL:	All data in the selected song is deleted.
CHD&FORM:	All Form track and Chord track data is deleted.
FORM:	The Form track data is deleted.
CHORD:	The Chord track data is deleted.
AUDIO:	The Audio track data (audio data) is deleted.

4. **Once you've decided on the data to delete, press [ENTER].**

   The data delete confirmation screen appears.



* *To cancel, press [EXIT]. The Data Delete Selection screen reappears.*

5. **Press [ENTER] to delete the Song.**

   The delete will be executed, and when it is finished the display will indicate "Completed!"

Copying an Entire Song

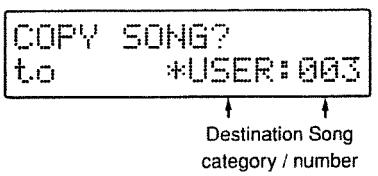
This copies an entire Preset Song or User Song to the User Songs. If copying a User Song, the audio data can also be copied along with the rest of the data.

1. Select the Song to be copied.

* *You cannot select User Songs stored on memory cards if no card is inserted.*

2. While play is stopped, press [COPY] ([SHIFT] + [EFFECTS]).

The Song copy screen appears.



3. Select the User Song to be used as the copy destination.

- Use [CURSOR] and [VALUE] to select "USER" (the JS-5) or "CARD" (memory card).

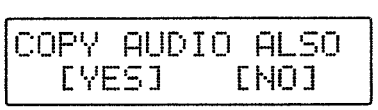
* *If no memory card is inserted, then you can't select "CARD" even when you press [CARD].*

- Use [CURSOR] and [VALUE] to select the Song number.

* *User Songs with no data recorded in them are indicated by an "*" in the display.*

4. Press [ENTER].

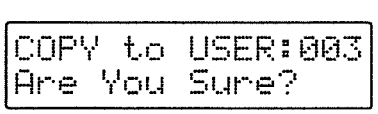
If the copy-source Song contains audio data, the audio data copy confirmation screen appears.



5. Specify whether or not you wish to copy audio data as well.

- If you wish to copy audio data as well, use [CURSOR] to make "YES" blink, and press [ENTER].
- If you do not wish to copy audio data, use [CURSOR] to make "NO" blink, and press [ENTER].

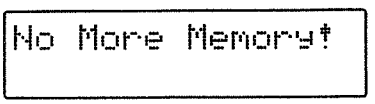
The Song copy confirmation screen appears.



* *Press [EXIT] to cancel. The* audio data copy confirmation screen *reappears.*

If there is not enough free memory at the copy destination, the following appears in the display.

* *After this appears, the Song screen returns to the display.*



6. Press [ENTER] to copy the data.

The copy will be executed, and when it is finished the display will indicate "Completed!"

Chapter 6 Adjusting the Balance Between Parts

To save the modified settings

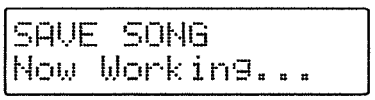
If you modify the settings of a user song, the modified content will be lost when you switch to another song/style. If you wish to keep the settings, use the following procedure.

1. **Press [REC], getting the button to light.**

   * *To cancel, press [EXIT].*

2. **Press [STOP].**

   The following screen will appear, and the settings will be saved.



   When the settings have been saved, you will return to the previous screen.

NOTE

Never turn off the power to the JS-5 or remove the memory card from the JS-5 while the " ▢ " still appears at the left of the display (when data is being written), as this can prevent the data from being written properly, and may adversely affect later operations.

MEMO

If you have changed the settings for the Preset Songs, then if you want to save the settings, copy them to a User Song (p. 82).

HINT

If you press [SHIFT] + [REC], the settings will be saved immediately.

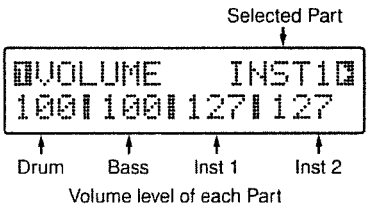
Adjusting the Volume for Each Part

You can adjust the volume of each of the Parts, "INST 1," "INST 2," "DRUM," and "BASS," and for the "Audio track."

1. **Select a Song.**

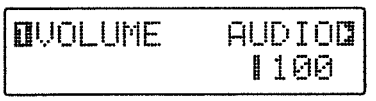
2. **Press [PART].**

3. **Press [CURSOR] to display "1 VOLUME."**



4. **Press [PART MUTE/SELECT] to select the Part on which you want to change the volume (or the Audio track).**

   * *When a User Song to which audio data is recorded is selected, the following screen appears when [AUDIO TRACK] is pressed.*



5. **Turn [VALUE] to change the volume.**

   Settings values: 0–127

   * *If you press [START], you can making the settings while listening to the performance.*

   * *When changing the volume of a part that uses Insert effects (p. 88), then depending on the instrument used in that part, the amount of the effect may also change when the volume is changed.*

6. **Repeat Steps 4 and 5 as needed.**

7. **Once you have finished making the settings, press [PART] once more, or press [EXIT].**

   The original screen reappears.

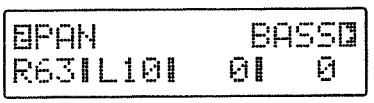
   * *If you wish to save the settings, execute the Save procedure.*

Changing the Pan for Each Part

You can adjust the Pan (placement of the sonic image) for each of the Parts, "INST 1," "INST 2," "DRUM," and "BASS."

* *The Audio track Pan is fixed at center.*

1. **Select a Song.**
2. **Press [PART].**
3. **Press [CURSOR] to display "2 PAN."**

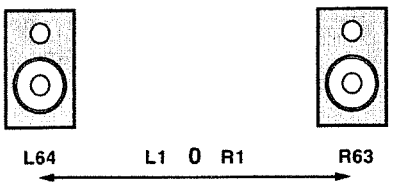


4. **Press [PART MUTE/SELECT] to select the Part for which the Pan is to be changed.**
5. **Turn [VALUE] to change the value.**

   Setting: L64-0-R63

   A setting of "L64" puts the sound all the way to the left, "C" places the sound in the center, and "R63" puts the sound completely to the right.

* *In some cases, the sound may be heard from the right (left) even though you set this to the far left (right).*



* *If you press [START], you can making the settings while listening to the performance.*

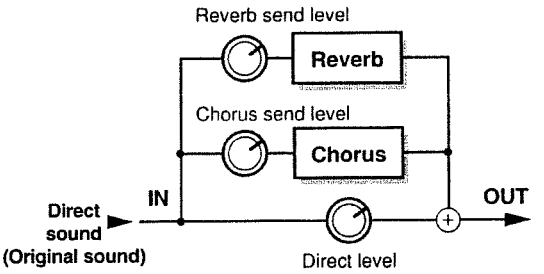
6. **Repeat Steps 4 and 5 as needed.**
7. **Once you have finished making the settings, press [PART] once more, or press [EXIT].**

   The original screen reappears.

* *If you wish to save the settings, execute the Save procedure (p. 83).*

Changing the Amount of Chorus and Reverb Applied to Each Part

You can change the amount of chorus and reverb applied to each of the Parts, "INST 1," "INST 2," "DRUM," and "BASS." Furthermore, you can simultaneously adjust the volume of the direct (dry) sound to get the proper balance between the reverb/chorus sound and the direct sound.



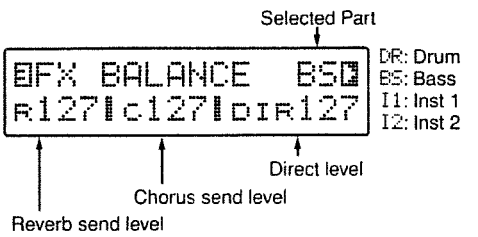
MEMO

To change the amount of reverb applied, adjust the **Reverb Send Level**. To change the amount of chorus, adjust the **Chorus Send Level**.

To change the volume of the direct sound, adjust the **Direct Level**.

* *You cannot apply chorus and reverb to the Audio track.*

1. **Select a Song .**
2. **Press [PART].**
3. **Press [CURSOR] to select "3 FX BALANCE."**



4. **Press [PART MUTE/SELECT] to select the Part for which the settings are to be changed.**
5. **Use [CURSOR] and [VALUE] to adjust the each level.**

   Settings values: 0–127

   The higher the value set, the more the reverb or chorus effect is applied. If you do not want any reverb or chorus effect applied, set this to "0."

* *For Parts in which Insert Effects (p. 88) are used, Direct Level adjusts the level of the sound after the Insert Effects are added. In this case, the following appears in the screen.*

* *If you press [START], you can making the settings while listening to the performance.*

* *When "0" is selected for all levels, no sound is produced for the selected Part.*

6. Repeat Steps 4 and 5 as needed.

7. Once you have finished making the settings, press [PART] once more, or press [EXIT].

The original screen reappears.

* *If you wish to save the settings, execute the Save procedure (p. 83).*

Chapter 7 Changing Effect Settings

The JS-5 features "Reverb," "Chorus," and "Insert Effects" as internal effects. This chapter explains the procedures used to change the settings for these effects.

* *You cannot apply effects to the Audio track.*

To save the modified settings

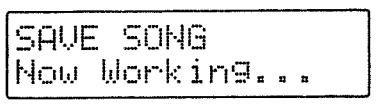
If you modify the settings of a user song, the modified content will be lost when you switch to another song/style. If you wish to keep the settings, use the following procedure.

1. **Press [REC], getting the button to light.**

   * *To cancel, press [EXIT].*

2. **Press [STOP].**

   The following screen will appear, and the settings will be saved.



   When the settings have been saved, you will return to the previous screen.

NOTE

Never turn off the power to the JS-5 or remove the memory card from the JS-5 while the " ▢ " still appears at the left of the display (when data is being written), as this can prevent the data from being written properly, and may adversely affect later operations.

MEMO

If you have changed the settings for the Preset Songs, then if you want to save the settings, copy them to a User Song (p. 82).

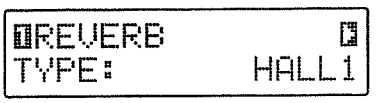
HINT

If you press [SHIFT] + [REC], the settings will be saved immediately.

Changing the Reverb Settings

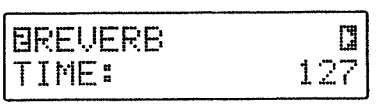
Select and change the reverb-related settings (parameters).

1. **Select a Song.**
2. **Press [EFFECTS].**
3. **Press [CURSOR] to select the parameter you want to change.**



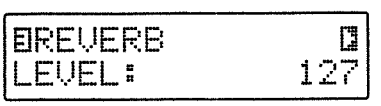
1 REVERB TYPE

Settings values: ROOM1, ROOM2, STAGE1, STAGE2, HALL1, HALL2, DELAY, PAN-DELAY



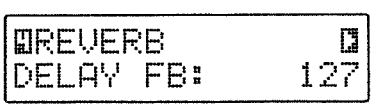
2 REVERB TIME

Settings values: 0–127



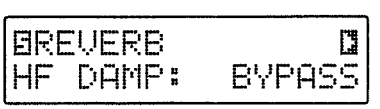
3 REVERB LEVEL

Settings values: 0–127



4 REVERB FEEDBACK

Settings values: 0–127



5 REVERB HF DAMP

Settings values: 0/250/315/400/500/630/800/1000/1250/1600/2000/2500/3150/4000/5000/6300/8000 Hz, BYPASS

4. **Turn [VALUE] to change the settings value.**

   * *If you wish to save the settings, execute the Save procedure.*

Functions of Each Parameter

1 REVERB TYPE

This selects the type of reverb effect.

ROOM1: Dense, short reverb
ROOM2: Thin, short reverb
STAGE1: Reverb with many later reflections
STAGE2: Reverb with strong first reflections
HALL1: Bright, clear reverb
HALL2: Rich reverb
DELAY: Basic, general delay
PAN-DELAY: Delay sound alternately panned left and right

2 REVERB TIME

When the TYPE is set to ROOM1-HALL2, this parameter sets the Reverb Time (the time the reverberation is allowed to continue); when TYPE is set to DELAY or PAN-DELAY, this sets the Delay Time. The higher the value set, the broader and fuller the sound appears.

3 REVERB LEVEL

This sets the amount of reverberation.

4 REVERB DELAY FB (Reverb delay feedback)

When TYPE is set to DELAY or PAN-DELAY, this sets the amount of the delayed sound that is returned to the Delay (Feedback). The higher the value set, the more continuous the delay sound becomes.

5 REVERB HF DAMP

This sets the cutoff frequency for the reverb sound's high-end component.

The amount of attenuation (cut) in the reverb's high frequencies changes according to the wall material. HF Damp (High Frequency Damp) is a parameter that simulates these conditions by cutting the high-frequency components of the sound.

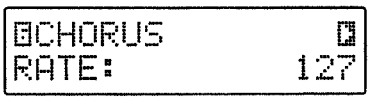
Setting this to a lower frequency creates a darker sound; when set to a higher frequency, the sound appears brighter.

When set to BYPASS, none of the high-frequency component is cut.

Changing the Chorus Settings

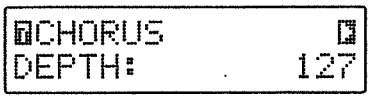
Select and change the chorus-related settings (parameters).

1. **Select a Song.**
2. **Press [EFFECTS].**
3. **Press [CURSOR] to select the parameter you want to change.**



6 CHORUS RATE

Settings values: 0–127

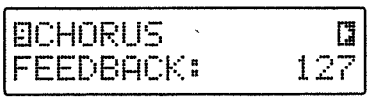


7 CHORUS DEPTH

Settings values: 0–127

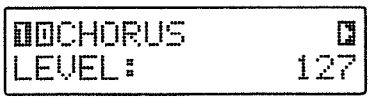
8 CHORUS PRE DELAY

Settings values: 0–127



9 CHORUS FEEDBACK

Settings values: 0–127



10 CHORUS LEVEL

Settings values: 0–127

4. **Turn [VALUE] to change the settings value.**

* *If you wish to save the settings, execute the Save procedure (p. 86).*

Functions of Each Parameter

6 CHORUS RATE

This sets the rate of the wavering chorus sound.

7 CHORUS DEPTH

This sets the depth of the chorus's undulating effect.

8 CHORUS PRE DELAY

This sets the elapsed time after the source sound is played before the chorus sound is produced. The higher the value set, the more breadth the sound appears to have.

9 CHORUS FEEDBACK

This sets the amount of the chorus sound that is returned to the chorus effect (Feedback). The higher the value set, the more complex the chorus sound becomes.

10 CHORUS LEVEL

This sets the amount of the chorus sound.

Using the Insert Effects

Insert Effects is the name for effects that can be applied directly to specific Parts. You can use the Insert Effects to change the tone of that Part.

There are forty types of Insert Effects, including "Overdrive" and "Distortion." You could think of each one of these effect as the equivalent of a separate effects device.

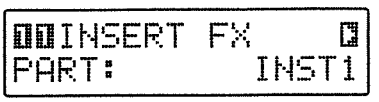
Some of these effect types include compound effects comprising two effects connected in sequence or in parallel.

* *You can select any one of the Parts, either "Drum," "Bass," "Inst 1," or Inst 2" with which to use the Insert Effects.*
* *In some cases, sound may be heard even if the output level of the insert effect is set to "0."*

Selecting the Part to Use with the Insert Effects

Select the Part, either "Drum," "Bass," "Inst 1," or Inst 2," which is to use the Insert Effects.

1. **Select a Song.**
2. **Press [EFFECTS].**
3. **Press [CURSOR] to select "11 INSERT FX PART."**



4. **Turn [VALUE] to to select the Part.**

   If you do not want the effect applied, select to "OFF."

* *If you wish to save the settings, execute the Save procedure (p. 86).*

Selecting the Type

Select an effect from the forty types available.

1. **Press [EFFECTS].**
2. **Press [CURSOR] to select "12 INSERT FX TYPE."**

3. **Turn [VALUE] to set to select the type.**

* *If you wish to save the settings, execute the Save procedure (p. 86).*

* *Refer to the Reference pages for more on the effects of each type.*

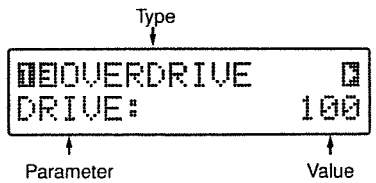
STEREO-EQ	(p. 90)
OVERDRIVE	(p. 90)
DISTORTION	(p. 91)
PHASER	(p. 91)
SPECTRUM	(p. 91)
ENHANCER	(p. 92)
AUTO-WAH	(p. 92)
ROTARY	(p. 92)
COMPRESSOR	(p. 93)
LIMITER	(p. 93)
HEX-CHORUS	(p. 94)
TREMOLO-CHO	(p. 94)
SPACE-D	(p. 95)
STEREO-CHO	(p. 95)
STEREO-FL	(p. 96)
STEP-FL	(p. 96)
STEREO-DLY	(p. 97)
MOD-DELAY	(p. 98)
3-TAP-DLY	(p. 99)
4-TAP-DLY	(p. 100)
TIMECTL-DLY	(p. 101)
2-P.SHIFT	(p. 101)
FB-P.SFT	(p. 102)
REVERB	(p. 102)
GATE-REVERB	(p. 103)
OD→CHO	(p. 103)
OD→FL	(p. 104)
OD→DLY	(p. 104)
DS→CHO	(p. 105)
DS→FL	(p. 105)
DS→DLY	(p.105)
EH→CHO	(p. 105)
EH→FL	(p. 106)
EH→DLY	(p. 106)
CHO→DLY	(p. 107)
FL→DLY	(p. 107)
CHO→FL	(p. 108)
CHO / DLT	(p. 108)
FL / DLY	(p. 108)
CHO / FL	(p. 108)

Changing the Settings for Each Type

This changes the settings (parameters) for the selected effect type.

* *The parameters that can be changed vary from one type to another.*

1. **Press [EFFECTS].**
2. **Press [CURSOR] to select "13 INSERT-FX TYPE."**
3. **Turn [VALUE] to set to select the type.**
4. **Press [CURSOR ►] to select the parameter you want to change.**

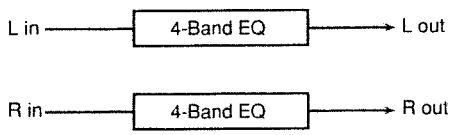


5. **Turn [VALUE] to change the settings value.**

* *If you wish to save the settings, execute the Save procedure (p. 86).*

STEREO-EQ (Stereo Equalizer)

This is a stereo equalizer which allows you to adjust the tone quality using a low range, two mid-range, and a high range control.



LOW FREQ (Low Frequency) 200/400 Hz

Select the frequency at which the low frequency range will be adjusted.

LOW GAIN -15–+15 dB

Specify the low frequency gain (amount of boost or cut).

Positive (+) settings will emphasize (boost) the low range.

HI FREQ (High Frequency) 4000/8000 Hz

Select the frequency at which the high range will be adjusted.

HI GAIN (High Gain) -15–+15 dB

Specify the high frequency gain (amount of boost or cut).

Positive (+) settings will emphasize (boost) the high range.

P1 FREQ (Peaking 1 Frequency) 200–8000 Hz

Specify the center frequency of the region in which the boost or cut will take place.

P1 Q (Peaking 1 Q) 0.5/1.0/2.0/4.0/8.0

Specify the width of the region centered on the P1 FREQ setting.

Higher settings will cause the region affected by P1 GAIN to be narrower.

P1 GAIN (Peaking 1 Gain) -15–+15 dB

Specify the gain (amount of boost or cut) that will take place in the region specified by P1 FREQ and P1 Q.

Positive (+) settings will emphasize (boost) the region specified by P1 FREQ and P1Q.

P2 FREQ (Peaking 2 Frequency) 200–8000 Hz

Specify the center frequency of the region in which the boost or cut will take place.

P2 Q (Peaking 2 Q) 0.5/1.0/2.0/4.0/8.0

Specify the width of the region centered on the P2 FREQ setting.

Higher settings will cause the region affected by P2 GAIN to be narrower.

P2 GAIN (Peaking 2 Gain) -15–+15 dB

Specify the gain (amount of boost or cut) that will take place in the region specified by P2 FREQ and P2 Q.

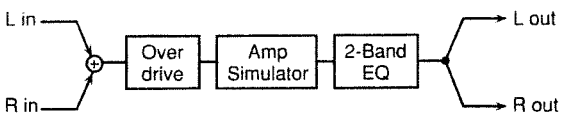
Positive (+) settings will emphasize (boost) the region specified by P2 FREQ and P2Q.

LEVEL (Output Level) 0–127

Specify the output volume.

OVERDRIVE

Overdrive produces a natural-sounding distortion similar to that produced by a vacuum tube amplifier.



DRIVE 0–127

Specify the depth of distortion. The volume will change together with the depth of distortion.

LEVEL (Output Level) 0–127

Specify the output volume.

You can use the Output Level setting to even out the volume difference between the sound with and without Overdrive.

LOW GAIN -15–+15 dB

Adjust the low frequency gain (amount of boost or cut).

Positive (+) settings will emphasize (boost) the low frequency range.

HI GAIN (High Gain) -15–+15 dB

Adjust the high frequency gain (amount of boost or cut).

Positive (+) settings will emphasize (boost) the high frequency range.

AMP (Amp Type) SMALL/BUILT-IN/2-STACK/3-STACK

Select the type of guitar amp.

SMALL: This simulates a compact amp.

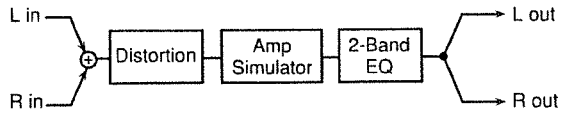
BUILT-IN: This simulates a built-in amp.

2-STACK: This simulates a large two-stack amp.

3-STACK: This simulates a large three-stack amp.

DISTORTION

Distortion produces a more intense distortion than the Overdrive effect.



DRIVE 0–127

Adjust the amount of distortion. The volume will change together with the amount of distortion.

LEVEL (Output Level) 0–127

Specify the output volume.

You can use the Output Level setting to even out the volume difference between the sound with and without Distortion.

LOW GAIN -15–+15 dB

Specify the low range gain (amount of boost or cut).

Positive (+) settings will emphasize (boost) the low frequency range.

HI GAIN (High Gain) -15–+15 dB

Specify the high range gain (amount of boost or cut).

Positive (+) settings will emphasize (boost) the high frequency range.

AMP (Amp Type) SMALL/BUILT-IN/2-STACK/3-STACK

Specify the type of guitar amp.

SMALL: This simulates a compact amp.

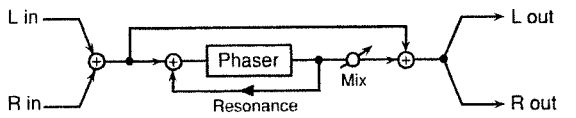
BUILT-IN: This simulates a built-in amp.

2-STACK: This simulates a large two-stack amp.

3-STACK: This simulates a large three-stack amp.

PHASER

Phaser is an effect that adds a phase-shifted sound to the original sound to create time-varying change, modulating the sound.



MANUAL 100 Hz–8 kHz

Specify the center frequency at which the sound is modulated.

RATE (Phaser Rate) 0.05–10.0 Hz

Specify the frequency of modulation.

DEPTH (Phaser Depth) 0–127

Specify the depth of modulation.

RESONANCE 0–127

Specify the amount of feedback for the phaser. Higher settings will give the sound a stronger character.

MIX (Mix Level) 0–127

Specify the volume of the phase-shifted sound, relative to the direct sound.

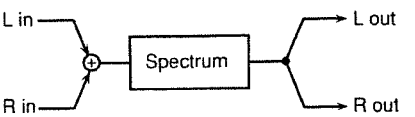
LEVEL (Output Level) 0–127

Specify the output volume.

SPECTRUM

Spectrum is a type of filter which boosts or cuts the level at specific frequencies to modify the tone.

It functions similarly to the equalizer, but since the eight frequencies are fixed at positions ideal for giving the sound more character, more distinctive sounds can be created.



The sounds are set with BANDs 1 to 6.

BAND 1 (Band 1 Level) -15–+15 dB

Specify the gain (amount of boost or cut) at 250 Hz.

BAND 2 (Band 2 Level) -15–+15 dB

Specify the gain (amount of boost or cut) at 500 Hz.

BAND 3 (Band 3 Level) -15–+15 dB

Specify the gain (amount of boost or cut) at 1000 Hz.

BAND 4 (Band 4 Level) -15–+15 dB

Specify the gain (amount of boost or cut) at 1250 Hz.

BAND 5 (Band 5 Level) -15–+15 dB

Specify the gain (amount of boost or cut) at 2000 Hz.

BAND 6 (Band 6 Level) -15–+15 dB

Specify the gain (amount of boost or cut) at 3150 Hz.

BAND 7 (Band 7 Level) -15–+15 dB

Specify the gain (amount of boost or cut) at 4000 Hz.

BAND 8 (Band 8 Level) -15–+15 dB

Specify the gain (amount of boost or cut) at 8000 Hz.

WIDTH (Bandwidth) 0.5–8.0

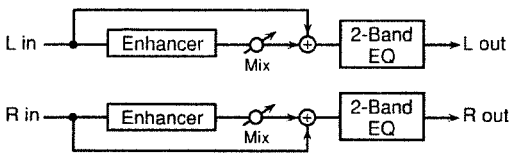
This setting, which is common for each Band, sets the width of the frequency band which is raised and lowered by the Level value.

LEVEL (Output Level) 0–127

Specify the output volume.

ENHANCER

Enhancer controls the overtone structure of the high frequency range, adding sparkle to the sound and improving the definition.



SENS (Sensitivity) 0–127

Specify the depth of the Enhancer effect.

MIX (Mix Level) 0–127

Specify the proportion by which the overtones generated by the enhancer will be mixed with the original sound.

LOW GAIN -15–+15 dB

Specify the low frequency gain (amount of boost or cut).

Positive (+) settings will emphasize (boost) the low frequency range.

HI GAIN (High Gain) -15–+15 dB

Specify the high frequency gain (amount of boost or cut).

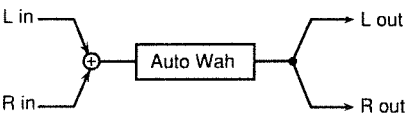
Positive (+) settings will emphasize (boost) the high frequency range.

LEVEL (Output Level) 0–127

Specify the output volume.

AUTO-WAH

Auto Wah cyclically moves the frequency of a filter to produce a wah effect (cyclic modulation of the tone).



FILTER TYPE LPF/BPF

Specify the type of filter.

LPF (Low-pass Filter):

The wah effect will be produced over a wide frequency range.

BPF (Bandpass Filter):

The wah effect will be produced over a narrow frequency range.

SENS (Sensitivity) 0–127

Specify the sensitivity with which the filter will be affected.

MANUAL 0–127

Specify the center frequency at which the wah effect will be produced.

PEAK 0–127

Specify how the wah effect will affect the region around the center frequency.

Lower settings will produce a wah effect in a broad area around the center frequency. Higher settings will produce a wah effect in a narrow area around the center frequency.

LFO RATE 0.05–10.0 Hz

Specify the modulation frequency of the wah effect.

LFO DEPTH 0–127

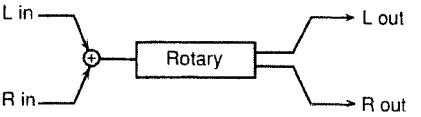
Specify the modulation depth of the wah effect.

LEVEL (Output Level) 0–127

Specify the output volume.

ROTARY

This simulates an old-fashioned rotary speaker, which adds undulations to the sound by rotating the speaker as it plays. This has the greatest effect when used with an organ sound. The horn (the treble-range speaker) and the rotor (the bass-range speaker) can be combined to re-create these subtle effects.



LOW SLOW (Low Frequency Slow Rate) 0.05–10.0 Hz

Specify the low-speed (SLOW) rotational speed of the low-range rotor.

LOW FAST (Low Frequency Fast Rate) 0.05–10.0 Hz

Specify the high-speed (FAST) rotational speed of the low-range rotor.

LOW ACCL (Low Frequency Acceleration) 0–15

Specify the time required for the rotational speed of the low-range rotor to change from the low speed to the high speed (or from the high speed to the low speed). More time will be required as the value of this parameter is decreased.

LOW LEVEL (Low Frequency Level) 0–127

Specify the volume of the low-range rotor.

HI SLOW (High Frequency Slow Rate) 0.05–10.0 Hz

Specify the low-speed (SLOW) rotational speed of the high-range rotor.

HI FAST (High Frequency Fast Rate) 0.05–10.0 Hz

Specify the high-speed (FAST) rotational speed of the high-range rotor.

HI ACCL (High Frequency Acceleration) 0–15

Specify the time required for the rotational speed of the high-range rotor to change from the low speed to the high speed (or from the high speed to the low speed). More time will be required as the value of this parameter is decreased.

HI LEVEL (High Frequency Level) 0–127

Specify the volume of the high-range rotor.

SEPARATE 0–127

Specify the spaciousness of the sound.

SPEED SLOW/FAST

Select the rotational speed of the low-range rotor and high-range rotor.

SLOW:

The specified rotational speeds (the LOW SLOW RATE/HI SLOW RATE values) will take effect.

FAST:

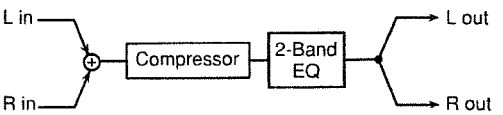
The specified rotational speeds (the LOW FAST RATE/HI FAST RATE values) will take effect.

LEVEL (Output Level) 0–127

Specify the output volume.

COMPRESSOR

Compressor is an effect which restricts high sound levels and boosts low sound levels, thus smoothing out variations in volume.



ATTACK (Attack Time) 0–127

Specify the attack time of the input sound.

SUSTAIN (Sustain Level) 0–127

Specify the time over which low-level sounds are boosted to a constant volume level.

POST GAIN 0/+6/+12/+18

Specify the output level.

LOW GAIN -15–+15 dB

Specify the low frequency range gain (amount of boost or cut).

Positive (+) settings will emphasize (boost) the low frequency range.

HI GAIN (High Gain) -15–+15 dB

Specify the high frequency range gain (amount of boost or cut).

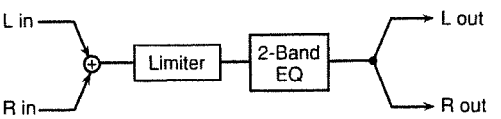
Positive (+) settings will emphasize (boost) the high frequency range.

LEVEL (Output Level) 0–127

Specify the output volume.

LIMITER

Limiter is an effect which compresses sounds that are louder than a specified volume level, preventing distortion from occurring.



THRESHOLD (Threshold Level) 0–127

Specify the volume level at which compression will begin.

RATIO (Compression Ratio) 1.5:1/2:1/4:1/100:1

Specify the compression ratio.

RELEASE (Release Time) 0–127

Specify the time from when the volume falls below the threshold level until the limiter effect no longer applies.

POST GAIN 0/+6/+12/+18

Specify the level of the output sound.

LOW GAIN -15–+15 dB

Specify the gain (amount of boost or cut) for the low frequency range. Positive (+) settings will emphasize (boost) the low frequency range.

HI GAIN (High Gain) -15–+15 dB

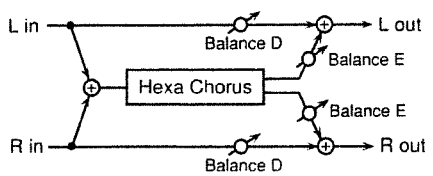
Specify the gain (amount of boost or cut) for the high frequency range. Positive (+) settings will emphasize (boost) the high frequency range.

LEVEL (Output Level) 0–127

Specify the output volume.

HEX-CHORUS (Hexa Chorus)

Hexa-chorus is a six-stage chorus which adds depth and spaciousness to the sound. (Six chorus sounds with different delay times are overlaid.)



PRE DELAY (Pre Delay Time) 0.0–100 ms

Specify the delay time from the original sound until when the chorus sound is heard.

RATE (Chorus Rate) 0.05–10.0 Hz

Specify the modulation frequency of the chorus sound.

DEPTH (Chorus Depth) 0–127

Specify the modulation depth of the chorus sound.

PRE DLY DEV (Pre Delay Deviation) 0–20

The Pre Delay parameter explained above specified the delay time from the original sound until when the chorus sound is heard. This Pre Delay Deviation parameter specifies the differences in Pre Delay time for each of the chorus sounds. Higher settings will cause each of the chorus sounds to be spread further apart.

DEPTH DEV (Depth Deviation) -20–+20

Specify the difference in modulation depth between each of the chorus sounds.

PAN DEV (Pan Deviation) 0–20

Specify the difference in stereo position between each of the chorus sounds.

With a setting of 0, all of the chorus sounds will be panned to the center. With a setting of 20, each chorus sound will be panned at 60 degree intervals relative to the center.

BALANCE (Effect Balance) D100:0E–D0:100E

Specify the volume balance between the original sound and the chorus sound.

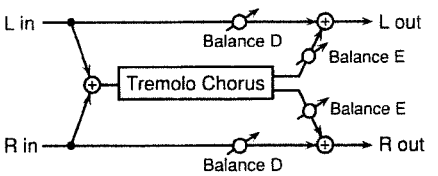
With a setting of D100:0E only the original sound will be output, and with a setting of D0:100E only the chorus sound will be output.

LEVEL (Output Level) 0–127

Specify the output volume.

TREMOLO-CHO (Tremolo Chorus)

Tremolo-chorus is a chorus with a tremolo effect (cyclic modulation of volume).



PRE DELAY (Pre delay Time) 0.0–100 ms

Specify the delay time from the original sound until when the chorus sound is heard.

CHO RATE (Chorus Rate) 0.05–10.0 Hz

Specify the modulation frequency of the chorus sound.

CHO DEPTH (Chorus Depth) 0–127

Specify the modulation depth of the chorus sound.

TREM PHASE (Tremolo Phase) 0–180

Specify the phase of the tremolo sound.

TREM RATE (Tremolo Rate) 0.05–10.0 Hz

Specify the modulation frequency of the tremolo effect.

TREM DEPTH (Tremolo Depth) 0–127

Specify the depth of the tremolo effect.

BALANCE (Effect Balance) D100:0E–D0:100E

Specify the volume balance between the original sound and the tremolo-chorus sound.

With a setting of D100:0E only the original sound will be output, and with a setting of D0:100E only the tremolo-chorus sound will be output.

LEVEL (Output Level) 0–127

Specify the output volume.

HINT

You can use the Tremolo Chorus as an Auto Pan by using the following settings for the Tremolo Chorus.

PRE DELAY: 0 ms

CHO DEPTH: 0

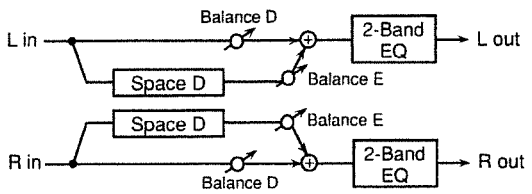
TREM PHASE: 180

TREM DEPTH: 127

BALANCE: D0:100E

SPACE-D

Space-D is a multiple chorus that applies two-stage modulation in stereo. Provides a truly lucent chorus sound.



PRE DELAY (Pre Delay Time) 0.0–100 ms

Specify the delay time from the original sound until the chorus sound is heard.

RATE (Chorus Rate) 0.05–10.0 Hz

Specify the modulation frequency of the chorus sound.

DEPTH (Chorus Depth) 0–127

Specify the modulation depth of the chorus sound.

PHASE 0–180

Specify the spaciousness of the chorus sound.

LOW GAIN -15–+15 dB

Specify the gain (amount of boost or cut) for the low frequency range. Positive (+) settings will emphasize (boost) the low frequency range.

HI GAIN (High Gain) -15–+15 dB

Specify the gain (amount of boost or cut) for the high frequency range. Positive (+) settings will emphasize (boost) the high frequency range.

BALANCE (Effect Balance) D100:0E–D0:100E

Specify the volume balance between the original sound and the chorus sound.

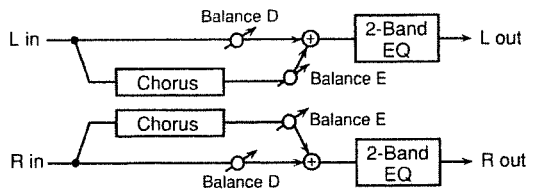
With a setting of D100:0E only the original sound will be output, and with a setting of D0:100E only the chorus sound will be output.

LEVEL (Output Level) 0–127

Specify the output volume.

STEREO-CHO (Stereo Chorus)

This is a stereo chorus. A filter allows you to adjust the tone of the chorus sound.



PRE DELAY (Pre Delay Time) 0.0–100 ms

Specify the time delay from the original sound until the chorus sound is heard.

RATE (Chorus Rate) 0.05–10.0 Hz

Specify the modulation frequency of the chorus sound.

DEPTH (Chorus Depth) 0–127

Specify the modulation depth of the chorus sound.

PHASE 0–180

Specify the spaciousness of the chorus sound.

FILTER TYPE OFF/LPF/HPF

Select the type of filter.

OFF:

A filter will not be used.

LPF (Low-pass Filter):

The frequency region above the Cutoff Freq setting will be cut.

HPF (High-pass Filter):

The frequency region below the Cutoff Freq setting will be cut.

CUTOFF (Cutoff Frequency) 200–8000 Hz

Specify the frequency at which the filter will begin cutting.

LOW GAIN -15–+15 dB

Specify the gain (amount of boost or cut) for the low frequency range. Positive (+) settings will emphasize (boost) the low frequency range.

HI GAIN (High Gain) -15–+15 dB

Specify the gain (amount of boost or cut) for the high frequency range. Positive (+) settings will emphasize (boost) the high frequency range.

BALANCE (Effect Balance) D100:0E–D0:100E

Specify the volume balance between the original sound and the chorus sound.

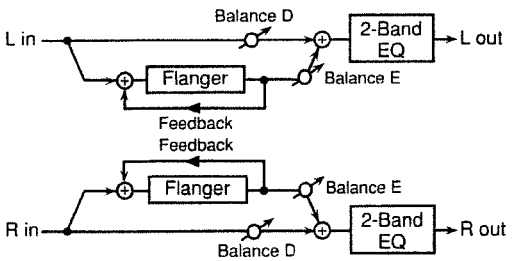
With a setting of D100:0E only the original sound will be output, and with a setting of D0:100E only the chorus sound will be output.

LEVEL (Output Level) 0–127

Specify the output volume.

STEREO-FL (Stereo Flanger)

This is a stereo flanger (the LFO has the same phase for left and right). This produces a metallic resonance reminiscent of a jet airplane taking off and landing. A filter is provided so that you can adjust the tone of the flanger sound.



PRE DELAY (Pre Delay Time) 0.0–100 ms

Specify the time delay from the original sound until the flanger sound is heard.

RATE (LFO Rate) 0.05–10.0 Hz

Specify the modulation frequency of the flanger sound.

DEPTH (LFO Depth) 0–127

Specify the modulation depth of the flanger sound.

FFEDBACK -98–+98%

Specify the proportion (%) of the flanger sound that is to be returned to the input.

Positive (+) settings will return the signal to the input with the original phase, while negative (-) settings produce an inverted phase.

Higher settings will produce a more distinctive sound.

PHASE 0–180

Specify the spaciousness of the flanger sound.

FILTER TYPE OFF/LPF/HPF

Specify the type of filter.

OFF:

A filter will not be used.

LPF (Low-pass Filter):

Cut the frequency region above the Cutoff Freq setting.

HPF (High-pass Filter):

Cut the frequency region below the Cutoff Freq setting.

CUTOFF (Cutoff Frequency) 200–8000 Hz

Specify the frequency at which the filter will begin cutting.

LOW GAIN -15–+15 dB

Specify the gain (amount of boost or cut) for the low frequency range.

Positive (+) settings will emphasize (boost) the low frequency range.

HI GAIN (High Gain) -15–+15 dB

Specify the gain (amount of boost or cut) for the high frequency range.

Positive (+) settings will emphasize (boost) the high frequency range.

BALANCE (Effect Balance) D100:0E–D0:100E

Specify the volume balance between the original sound and the flanger sound.

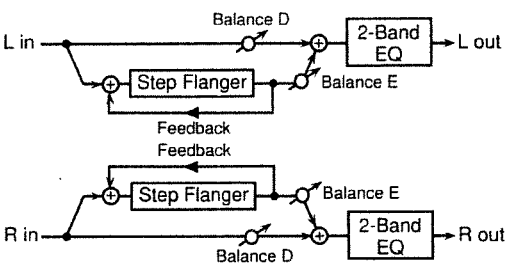
With a setting of D100:0E only the original sound will be output, and with a setting of D0:100E only the flanger sound will be output.

LEVEL (Output Level) 0–127

Specify the output volume.

STEP-FL (Step Flanger)

Step flanger is a flanger in which the pitch of the flanger sound changes in steps. The frequency of the pitch change can be specified as a note length of a specific tempo.



PRE DELAY (Pre Delay Time) 0.0–100 ms

Specify the time delay from the original sound until the flanger sound is heard.

RATE (LFO Rate) 0.05–10.0 Hz

Specify the modulation frequency of the flanger sound.

DEPTH (LFO Depth) 0–127

Specify the modulation depth of the flanger sound.

FEEDBACK -98–+98%

Specify the proportion (%) of the flanger sound that is to be returned to the input.

Positive (+) settings will return the signal to the input with the original phase, while negative (-) settings produce an inverted phase.

Higher settings will produce a more distinctive sound.

PHASE 0–180

Specify the spaciousness of the flanger sound.

STEP RATE
0.05–10.0 Hz/♪ /♪. /♪ /♪/♩./♪ /♩ /♩. /♩. /𝅗𝅥

Specify the frequency of pitch change.

* *When set with a note, the Step Rate is synchronized to the MIDI clock of the JS-5 or an external device. Use Clock Source (p. 133), a system parameter, to select whether the MIDI clock of the JS-5 or the external device is to be used for synchronization.*
* *When a numerical setting is made, the MIDI clock is ignored. If the setting is made with a note but no external MIDI clock is received, the changes in pitch are synchronized with the JS-5's built-in default tempo (p. 133).*

LOW GAIN -15–+15 dB

Specify the gain (amount of boost or cut) for the low frequency range.

Positive (+) settings will emphasize (boost) the low frequency range.

HI GAIN (High Gain) -15–+15 dB

Specify the gain (amount of boost or cut) for the high frequency range.

Positive (+) settings will emphasize (boost) the high frequency range.

BALANCE (Effect Balance) D100:0E–D0:100E

Specify the volume balance between the original sound and the flanger sound.

With a setting of D100:0E only the original sound will be output, and with a setting of D0:100E only the flanger sound will be output.

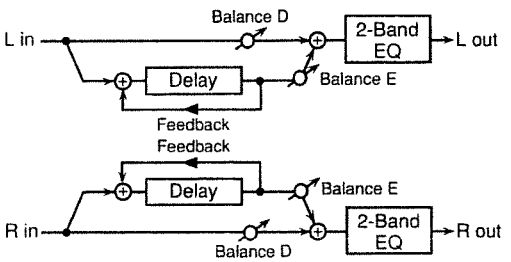
LEVEL (Output Level) 0–127

Specify the output volume.

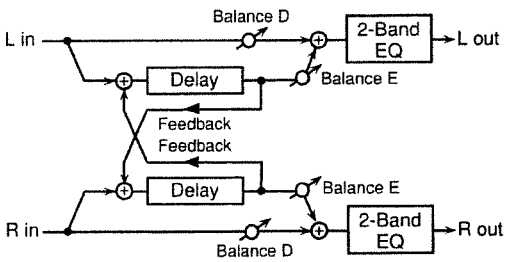
STEREO-DLY (Stereo Delay)

This is a stereo delay.

When FB MODE parameter is NORMAL:



When FB MODE parameter is CROSS:



DELAY L (Delay Time Left) 0.0–500 ms

Specify the delay time from the original sound until the left delay sound is heard.

DELAY R (Delay Time Right) 0.0–500 ms

Specify the delay time from the original sound until the right delay sound is heard.

FEEDBACK -98–+98%

Specify the proportion (%) of the delay sound that is to be returned to the input.

Positive (+) settings will return the sound to the input with the original phase, while negative (-) settings produce an inverted phase.

FB MODE (Feedback Mode) NORMAL/CROSS

Specify the input destination to which the delay sound will be returned.

NORMAL:

The left delay sound will be returned to the left input, and the right delay sound to the right input.

CROSS:

The left delay sound will be returned to the right input, and the right delay sound to the left input.

PHASE L (Phase Left) NORMAL/INVERT

Specify the phase of the left delay sound.

NORMAL: The phase will not change.

INVERT: The phase will be inverted.

PHASE R (Phase Right) NORMAL/INVERT

Specify the phase of the right delay sound.

NORMAL: The phase will not change.

INVERT: The phase will be inverted.

HF DAMP (High-Frequency Damp) 200–8000 Hz, BYPASS

Specify the frequency at which the high frequency range of the delayed sound returned to the input will be cut.

If you do not want the sound to be cut, select BYPASS.

LOW GAIN -15–+15 dB

Specify the gain (amount of boost or cut) for the low frequency range.

Positive (+) settings will emphasize (boost) the low frequency range.

HI GAIN (High Gain) -15–+15 dB

Specify the gain (amount of boost or cut) for the high frequency range.

Positive (+) settings will emphasize (boost) the high frequency range.

BALANCE (Effect Balance) D100:0E–D0:100E

Specify the volume balance between the original sound and the delay sound.

With a setting of D100:0E only the original sound will be output, and with a setting of D0:100E only the delay sound will be output.

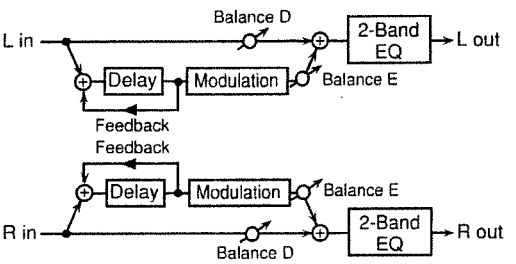
LEVEL (Output Level) 0–127

Specify the output volume.

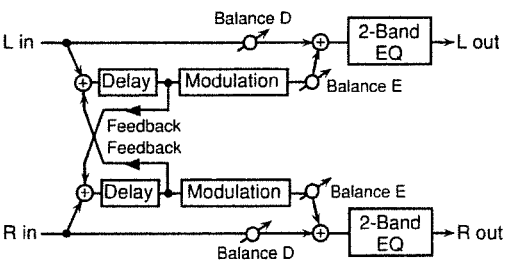
MOD-DELAY (Modulation Delay)

Modulation-delay is an effect which adds modulation to the delay sound. It produces a flanger-like effect.

When FB MODE parameter is NORMAL:



When FB MODE parameter is CROSS:



DELAY L (Delay Time Left) 0.0–500 ms

Specify the delay time from the original sound until the left delay sound is heard.

DELAY R (Delay Time Right) 0.0–500 ms

Specify the delay time from the original sound until the right delay sound is heard.

FEEDBACK -98–+98%

Specify the proportion (%) of the delay sound that is to be returned to the input.

Positive (+) settings will return the sound to the input with the original phase, while negative (-) settings produce an inverted phase.

FB MODE (Feedback Mode) NORMAL/CROSS

Specify the input destination to which the delay sound will be returned.

NORMAL:

The left delay sound will be returned to the left input, and the right delay sound to the right input.

CROSS:

The left delay sound will be returned to the right input, and the right delay sound to the left input.

RATE (Modulation Rate) 0.05–10.0 Hz

Specify the modulation frequency of the modulation effect.

DEPTH (Modulation Depth) 0–127

Specify the modulation depth of the modulation effect.

PHASE 0–180

Specify the spaciousness of the modulation sound.

HF DAMP (High-Frequency Damp) 200–8000 Hz, BYPASS

Specify the frequency at which the high frequency range of the delay sound returned to the input will be cut.

If you do not want the sound to be cut, select BYPASS.

LOW GAIN -15–+15 dB

Specify the gain (amount of boost or cut) of the low frequency range.

Positive (+) settings will emphasize (boost) the low frequency range.

HI GAIN (High Gain) -15–+15 dB

Specify the gain (amount of boost or cut) of the high frequency range.

Positive (+) settings will emphasize (boost) the high frequency range.

BALANCE (Effect Balance) D100:0E–D0:100E

Specify the volume balance between the original sound and the modulation-delay sound.

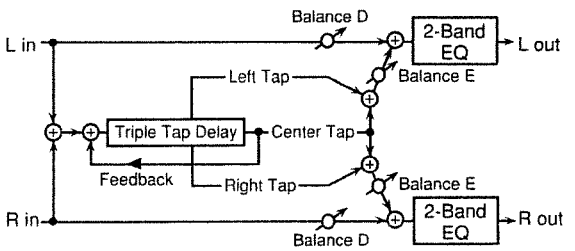
With a setting of D100:0E only the original sound will be output, and with a setting of D0:100E only the modulation-delay sound will be output.

LEVEL (Output Level) 0–127

Specify the output volume.

3-TAP-DLY (Triple Tap Delay)

Triple-tap-delay is an effect that produces delays in three directions: center, left and right. The delay time can also be specified as a note length relative to a specific tempo.



DELAY C (Delay Time Center) 200–1000 ms/♪ /♪. /♪ /♪/♩/♪. /♩ /♩. /♩. /𝅗𝅥

Specify the delay time from the original sound until the center delay sound is heard.

* *When set with a note, the Step Rate is synchronized to the MIDI clock of the JS-5 or an external device. Use Clock Source (p. 133), a system parameter, to select whether the MIDI clock of the JS-5 or the external device is to be used for synchronization.*
* *When a note value has been selected as the setting, and the tempo is slowed so much that the resulting delay time exceeds the permissible range, the actual delay time will be 1/2, 1/4, 1/8... of the selected note values, in keeping with the tempo in use at that time.*
* *When a numerical setting is made, the MIDI clock is ignored. If the setting is made with a note but no external MIDI clock is received, the changes in pitch are synchronized with the JS-5's built-in default tempo (p. 133).*

DELAY L (Delay Time Left) 200–1000 ms/♪ /♪. /♪ /♪/♩/♪. /♩ /♩. /♩. /𝅗𝅥

Specify the delay time from the original sound until the left delay sound is heard.

DELAY R (Delay Time Right) 200–1000 ms/♪ /♪. /♪ /♪/♩/♪. /♩ /♩. /♩. /𝅗𝅥

Specify the delay time from the original sound until the right delay sound is heard.

FEEDBACK -98–+98%

Specify the proportion (%) of the delay sound that is to be returned to the input.

Positive (+) settings will return the sound to the input with the original phase, while negative (-) settings produce an inverted phase.

LEVEL C (Center Level) 0–127

Specify the volume of the center delay sound.

LEVEL L (Left Level) 0–127

Specify the volume of the left delay sound.

LEVEL R (Right Level) 0–127

Specify the volume of the right delay sound.

HF DAMP (High-Frequency Damp) 200–8000 Hz, BYPASS

Specify the frequency at which the high frequency range of the delayed sound returned to the input will be cut.

If you do not want the sound to be cut, select BYPASS.

LOW GAIN -15–+15 dB

Specify the gain (amount of boost or cut) for the low frequency range.

Positive (+) settings will emphasize (boost) the low frequency range.

HI GAIN (High Gain) -15–+15 dB

Specify the gain (amount of boost or cut) for the high frequency range.

Positive (+) settings will emphasize (boost) the high frequency range.

BALANCE (Effect Balance) D100:0E–D0:100E

Specify the volume balance between the original sound and the delay sound.

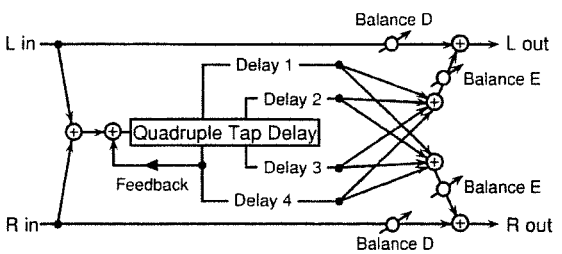
With a setting of D100:0E only the original sound will be output, and with a setting of D0:100E only the delay sound will be output.

LEVEL (Output Level) 0–127

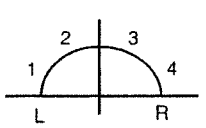
Specify the output volume.

4-TAP-DLY (Quadruple Tap Delay)

Quadruple-tap-delay provides four delays. The delay time for each delay can be specified as a note length relative to a specific tempo.



The stereo location of each delay sound is as follows.



DELAY 1 (Delay Time 1) 200–1000 ms/♪ /♪. /♪ /♪/♩. /♪ /♩ /♩. /♩. /♩

Specify the delay time from the original sound until the delay 1 sound is heard.

* *When set as a note value, the Delay Time can be synchronized with the module's internal clock or the MIDI clock arriving from an external device. For details, refer to "3-TAP-DLY."*
* *When a note value has been selected as the setting, and the tempo is slowed so much that the resulting delay time exceeds the permissible range, the actual delay time will be 1/2, 1/4, 1/8... of the selected note values, in keeping with the tempo in use at that time.*

DELAY 2 (Delay Time 2) 200–1000 ms/♪ /♪. /♪ /♪/♩. /♪ /♩ /♩. /♩. /♩

Specify the delay time from the original sound until the delay 2 sound is heard.

DELAY 3 (Delay Time 3) 200–1000 ms/♪ /♪. /♪ /♪/♩. /♪ /♩ /♩. /♩. /♩

Specify the delay time from the original sound until the delay 3 sound is heard.

DELAY 4 (Delay Time 4) 200–1000 ms/♪ /♪. /♪ /♪/♩. /♪ /♩ /♩. /♩. /♩

Specify the delay time from the original sound until the delay 4 sound is heard.

LEVEL 1 (Level 1) 0–127

Specify the volume level of delay 1.

LEVEL 2 (Level 2) 0–127

Specify the volume level of delay 2.

LEVEL 3 (Level 3) 0–127

Specify the volume level of delay 3.

LEVEL 4 (Level 4) 0–127

Specify the volume level of delay 4.

FEEDBACK -98–+98%

Specify the proportion (%) of the delay sound that is to be returned to the input.

Positive (+) settings will return the sound to the input with the original phase, while negative (-) settings produce an inverted phase.

HF DAMP (High-Frequency Damp) 200–8000 Hz, BYPASS

Specify the frequency at which the high frequency range of the delayed sound returned to the input will be cut.

If you do not want the sound to be cut, select BYPASS.

BALANCE (Effect Balance) D100:0E–D0:100E

Specify the volume balance between the original sound and the delay sound.

With a setting of D100:0E only the original sound will be output, and with a setting of D0:100E only the delay sound will be output.

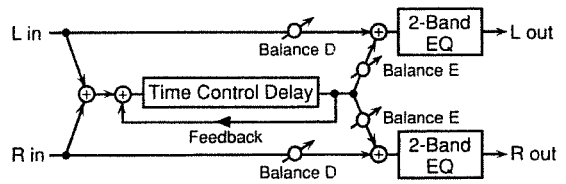
LEVEL (Output Level) 0–127

Specify the output volume.

TIMECTL-DLY (Time Control Delay)

This lets you control a delay time in real time.

When the delay time has been made to change, the delay time and pitch of the delayed sound change at the speed set for Acceleration. Depending on the settings you use, you can achieve some really tricky effects with this.



DELAY (Delay Time) 200–1000 ms

Specify the time delay from the original sound until the delay sound is heard.

ACCELERATION 0–15

Specify the time over which the current delay time will change to the newly-specified delay time when the delay time is modified. The speed of the pitch change will be proportionate to the delay time.

FEEDBACK -98–+98%

Specify the proportion (%) of the delay sound that is to be returned to the input.

Positive (+) settings will return the sound to the input with the original phase, while negative (-) settings produce an inverted phase.

HF DAMP (High-Frequency Damp) 200–8000 Hz, BYPASS

Specify the frequency at which the high frequency range of the delayed sound returned to the input will be cut.

If you do not want the sound to be cut, select BYPASS.

LOW GAIN -15–+15 dB

Specify the gain (amount of boost or cut) for the low frequency range. Positive (+) settings will emphasize (boost) the low frequency range.

HI GAIN (High Gain) -15–+15 dB

Specify the gain (amount of boost or cut) for the high frequency range. Positive (+) settings will emphasize (boost) the high frequency range.

BALANCE (Effect Balance) D100:0E–D0:100E

Specify the volume balance between the original sound and the delay sound.

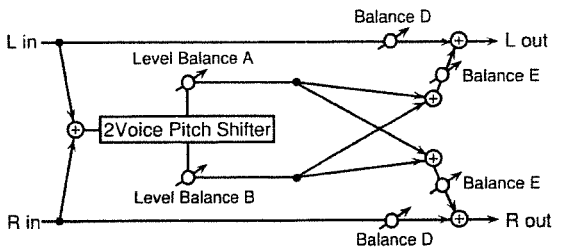
With a setting of D100:0E only the original sound will be output, and with a setting of D0:100E only the delay sound will be output.

LEVEL (Output Level) 0–127

Specify the output volume.

2-P.SHIFT (2 Voice Pitch Shifter)

Pitch Shifter is an effect that shifts the pitch of the original sound. 2-voice-pitch-shifter has two pitch shifters, and is able to add two pitch-shifted sounds to the original sound.



COARSE A (Coarse Pitch A) -24–+12

Specify the pitch shift amount in semitones for pitch shift A. (-2–+1 octave)

FINE A (Fine Pitch A) -100–+100

Adjust the pitch shift amount in 2-cent units (1 cent = 1/100th of a semitone) for pitch shift A.

* *No effect will be obtained if, when COARSE A is set to +12, you specify any value from 0 to 100; or, when COARSE A is set to -24, you specify any value from 0 to -100.*

PRE DLY A (Pre Delay Time A) 0.0–500 ms

Specify the time delay from the original sound until the pitch shift A sound is heard.

COARSE B (Coarse Pitch B) -24–+12

Specify the pitch shift amount in semitones for pitch shift B. (-2–+1 octave)

FINE B (Fine Pitch B) -100–+100

Adjust the pitch shift amount in 2-cent units (1 cent = 1/100th of a semitone) for pitch shift B.

* *No effect will be obtained if, when COARSE B is set to +12, you specify any value from 0 to 100; or, when COARSE B is set to -24, you specify any value from 0 to -100.*

PRE DLY B (Pre Delay Time B) 0.0–500 ms

Specify the time delay from the original sound until the pitch shift B sound is heard.

MODE (Pitch Shift Mode) 1–5

Higher settings will cause the response to be slower, but the pitch will be steadier.

LVL BAL (Level Balance) A100:0B–A0:100B

Adjust the volume balance between the pitch shift A and pitch shift B sounds.

With a setting of A100:0B only the pitch shift A sound will be output, and with a setting of A0:100B only the pitch shift B sound will be output.

FX BAL (Effect Balance) D100:0E–D0:100E

Adjust the volume balance between the original sound and the pitch shift sound.

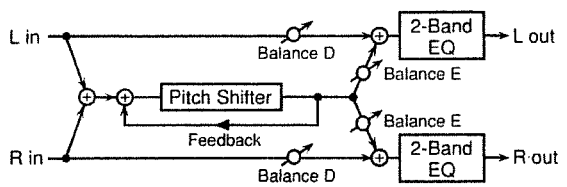
With a setting of D100:0E only the original sound will be output, and with a setting of D0:100E only the pitch shift sound will be output.

LEVEL (Output Level) 0–127

Specify the output volume.

FB-P.SFT (Feedback Pitch Shifter)

This is a pitch shifter that is able to return the pitch shifted sound back to the input.



COARSE (Coarse Pitch) -24 to +12

Specify the pitch shift amount in semitone steps. (-2–+1 octave)

FINE (Fine Pitch) -100–+100

Adjust the pitch shift amount in 2-cent steps (1 cent = 1/100th of a semitone).

* *No effect will be obtained if, when COARSE is set to +12, you specify any value from 0 to 100; or, when COARSE is set to -24, you specify any value from 0 to -100.*

PRE DELAY (Pre Delay Time) 0.0–500 ms

Specify the time delay from the original sound until the pitch shift sound is heard.

MODE (Pitch Shift Mode) 1–5

Higher settings will cause the response to be slower, but the pitch will be steadier.

FEEDBACK -98–+98%

Specify the proportion (%) of the pitch shift sound that is to be returned to the input.

Positive (+) settings will return the sound to the input with the original phase, while negative (-) settings produce an inverted phase.

LOW GAIN -15–+15 dB

Specify the gain (amount of boost or cut) of the low frequency range.

Positive (+) settings will emphasize (boost) the low frequency range.

HI GAIN (High Gain) -15–+15 dB

Specify the gain (amount of boost or cut) of the high frequency range. Positive (+) settings will emphasize (boost) the high frequency range.

BALANCE (Effect Balance) D100:0E–D0:100E

Specify the volume balance between the original sound and the pitch shift sound.

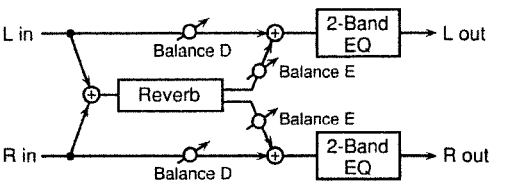
With a setting of D100:0E only the original sound will be output, and with a setting of D0:100E only the pitch shift sound will be output.

LEVEL (Output Level) 0–127

Specify the output volume.

REVERB

Reverb adds reverberation to the original sound, simulating an acoustic space.



TYPE (Reverb Type) ROOM1/ROOM2/STAGE1/ STAGE2/HALL1/HALL2

Specify the type of reverb.

ROOM1: Short reverberation

ROOM2: Short reverberation with low density

STAGE1: Reverberation with heavy subsequent reverberation

STAGE2: Reverberation with strong early reflections

HALL1: Clear reverberation

HALL2: Rich reverberation

PRE DELAY (Pre Delay Time) 0.0–100 ms

Specify the time delay from the original sound until the reverb is heard.

TIME (Reverb Time) 0–127

Specify the length of reverberation.

HF DAMP (High-Frequency Damp) 200–8000 Hz, BYPASS

Specify the frequency at which the high frequency portion of the reverb sound will be cut.

Lower frequency settings will cause a greater portion of the high range to be cut, producing a softer reverb sound.

If you do not want the sound to be cut, select BYPASS.

LOW GAIN -15–+15 dB

Specify the gain (amount of boost or cut) of the low frequency range. Positive (+) settings will emphasize (boost) the low frequency range.

HI GAIN (High Gain) -15–+15 dB

Specify the gain (amount of boost or cut) of the high frequency range.

Positive (+) settings will emphasize (boost) the high frequency range.

BALANCE (Effect Balance) D100:0E–D0:100E

Specify the volume balance between the original sound and the reverb sound.

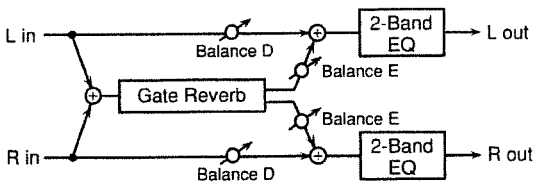
With a setting of D100:0E only the original sound will be output, and with a setting of D0:100E only the reverb sound will be output.

LEVEL (Output Level) 0–127

Specify the output volume.

GATE-REVERB

Gate reverb is a type of reverb effect which cuts the reverb sound during its decay.



TYPE (Reverb Type) NORMAL/REVERSE/ SWEEP1/SWEEP2

Specify the type of reverb.

NORMAL: Conventional gated reverb.

REVERSE: Reverse reverb.

SWEEP1: The reverb sound moves from right to left.

SWEEP2: The reverb sound moves from left to right.

PRE DELAY (Pre Delay Time) 0.0–100 ms

Specify the time delay from the original sound until the reverb is heard.

GATE TIME 5–500

Specify the length of the reverb sound.

LOW GAIN -15–+15 dB

Specify the gain (amount of boost or cut) of the low frequency range.

Positive (+) settings will emphasize (boost) the low frequency range.

HI GAIN (High Gain) -15–+15 dB

Specify the gain (amount of boost or cut) of the high frequency range.

Positive (+) settings will emphasize (boost) the high frequency range.

BALANCE (Effect Balance) D100:0E–D0:100E

Specify the volume balance between the original sound and the reverb sound.

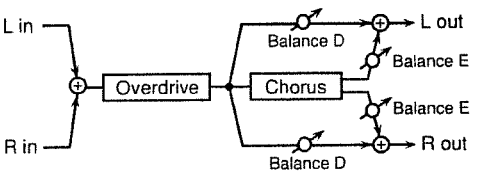
With a setting of D100:0E only the original sound will be output, and with a setting of D0:100E only the reverb sound will be output.

LEVEL (Output Level) 0–127

Specify the output volume.

OD → CHO (Overdrive → Chorus)

This effect connects an overdrive and chorus in series.



OD DRIVE 0–127

Specify the amount of distortion for the overdrive. The volume will change together with the amount of distortion.

CHO PREDLY (Chorus Pre delay) 0.0–100 ms

This sets the interval from the time when the original sound is played until the time when the chorus sound is played.

CHO RATE (Chorus Rate) 0.05–10.0 Hz

Specify the modulation frequency of the chorus sound.

CHO DEPTH (Chorus Depth) 0–127

Specify the modulation depth of the chorus sound.

CHO BAL (Chorus Balance) D100:0E–D0:100E

Specify the relative volume levels for the overdrive sound that does not pass through chorus, versus that which does.

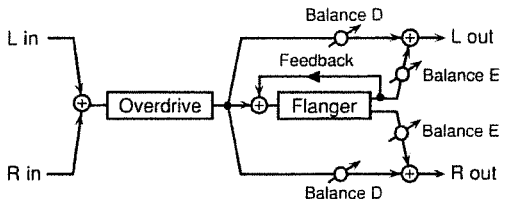
A setting of D100:0E will result in output of solely the overdrive sound, while a setting of D0:100E will cause only the overdrive sound that is passed through chorus to be output.

LEVEL (Output Level) 0–127

Specify the output volume.

OD → FL (Overdrive → Flanger)

This effect connects an overdrive and a flanger in series.



OD DRIVE 0–127

Specify the amount of distortion for the overdrive. The volume will change together with the amount of distortion.

FL PRE DLY (Flanger Pre delay) 0.0–100 ms

Specify the time delay from the original sound until the flanger sound is heard.

FL RATE (Flanger Rate) 0.05–10.0 Hz

Specify the modulation frequency of the flanger sound.

FL DEPTH (Flanger Depth) 0–127

Specify the modulation depth of the flanger sound.

FL FEEDBACK (Flanger Feedback) -98–+98%

Specify the proportion (%) of the flanger sound that is to be returned to the input.

Positive (+) settings will return the sound to the input with the original phase, while negative (-) settings produce an inverted phase.

FL BAL (Flanger Balance) D100:0E–D0:100E

Specify the volume balance between the overdrive sound that does not pass through the flanger and the overdrive sound that does pass through the flanger.

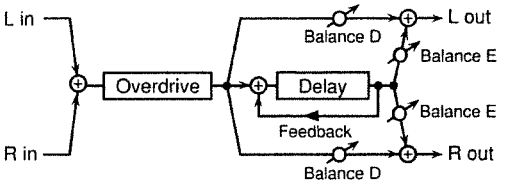
A setting of D100:0E will output only the overdrive sound, and a setting of D0:100E will output only the overdrive sound that is passed through the flanger.

LEVEL (Output Level) 0–127

Specify the output volume.

OD → DLY (Overdrive → Delay)

This effect connects an overdrive and a delay in series.



OD DRIVE 0–127

Specify the amount of distortion for the overdrive. The volume will change together with the amount of distortion.

DLY TIME (Delay Time) 0.0–500 ms

Specify the time delay from the original sound until the delay sound is heard.

DLY FB (Delay Feedback) -98–+98%

Specify the proportion (%) of the delay sound that is to be returned to the input.

Positive (+) settings will return the sound to the input with the original phase, while negative (-) settings produce an inverted phase.

DLY HF (Delay HF Damp) 200–8000 Hz, BYPASS

Specify the frequency at which the high frequency range of the delayed sound returned to the input will be cut.

If you do not want the sound to be cut, select BYPASS.

DLY BAL (Delay Balance) D100:0E–D0:100E

Specify the volume balance between the overdrive sound that does not pass through the delay and the overdrive sound that does pass through the delay.

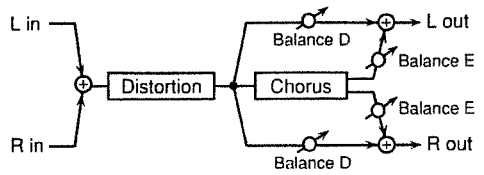
A setting of D100:0E will output only the overdrive sound, and a setting of D0:100E will output only the overdrive sound that is passed through the delay.

LEVEL (Output Level) 0–127

Specify the output volume.

DS → CHO (Distortion → Chorus)

This effect connects distortion and chorus in series.



The parameters are essentially the same as "OD → CHO," with the exception of the following two.

DS DRIVE (Distortion Drive) 0–127

Specify the amount of distortion for the overdrive. The volume will change together with the amount of distortion.

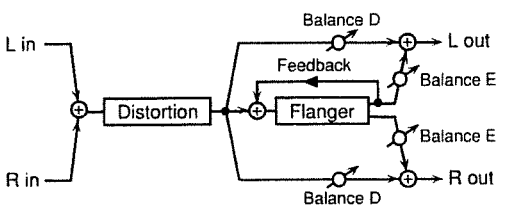
CHO BAL (Chorus Balance) D100:0E–D0:100E

Specify the relative volume levels for the distortion sound that does not pass through chorus, versus that which does.

A setting of D100:0E will result in output of solely the distortion sound, while a setting of D0:100E will cause only the distortion sound that is passed through chorus to be output.

DS → FL (Distortion → Flanger)

This effect connects distortion and flanger in series.



The parameters are essentially the same as in "OD → FL," with the exception of the following two.

DS DRIVE (Distortion Drive) 0–127

Specify the amount of distortion for the distortion. The volume will change together with the amount of distortion.

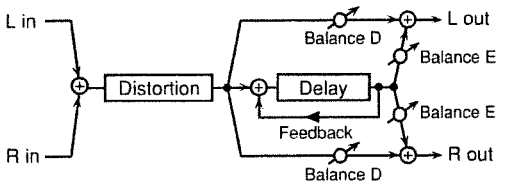
FL BAL (Flanger Balance) D100:0E–D0:100E

Specify the volume balance between the distortion sound that does not pass through the flanger and the distortion sound that does pass through the flanger.

A setting of D100:0E will output only the distortion sound, and a setting of D0:100E will output only the distortion sound that is passed through the flanger.

DS → DLY (Distortion → Delay)

This effect connects distortion and delay in series.



The parameters are essentially the same as in "OD → DLY," with the exception of the following two.

DS DRIVE (Distortion Drive) 0–127

Specify the amount of distortion for the overdrive. The volume will change together with the amount of distortion.

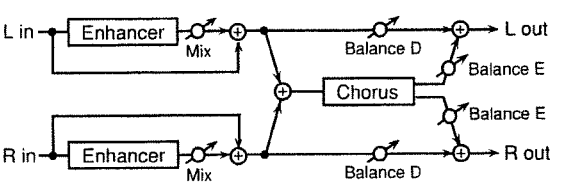
DLY BAL (Delay Balance) D100:0E–D0:100E

Specify the volume balance between the distortion sound that does not pass through the delay and the distortion sound that does pass through the delay.

A setting of D100:0E will output only the distortion sound, and a setting of D0:100E will output only the distortion sound that is passed through the delay.

EH → CHO (Enhancer → Chorus)

This effect connects an enhancer and a chorus in series.



EH SENS (Enhancer Sensitivity) 0–127

Specify the sensitivity of the enhancer.

EH MIX (Enhancer Mix Level) 0–127

Specify the volume of the overtones generated by the enhancer, relative to the original sound.

CHO PREDLY (Chorus Pre delay) 0.0–100 ms

Specify the time delay from the original sound until the chorus sound is heard.

CHO RATE (Chorus Rate) 0.05–10.0 Hz

Specify the modulation frequency of the chorus sound.

CHO DEPTH (Chorus Depth) 0–127

Specify the modulation depth of the chorus sound.

CHO BAL (Chorus Balance) D100:0E–D0:100E

Specify the volume balance between the enhancer sound that does not pass through the chorus and the enhancer sound that does pass through the chorus.

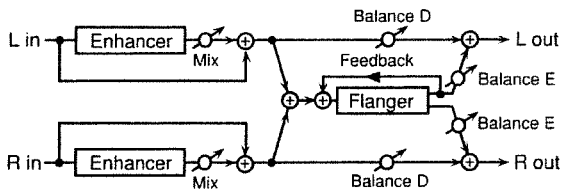
A setting of D100:0E will output only the enhancer sound, and a setting of D0:100E will output only the enhancer sound that is passed through the chorus.

LEVEL (Output Level) 0–127

Specify the output volume.

EH → FL (Enhancer → Flanger)

This effect connects an enhancer and a flanger in series.



EH SENS (Enhancer Sensitivity) 0–127

Specify the sensitivity of the enhancer.

EH MIX (Enhancer Mix Level) 0–127

Specify the volume of the overtones generated by the enhancer, relative to the original sound.

FL PRE DLY (Flanger Pre delay) 0.0–100 ms

Specify the time delay from the original sound until the flanger sound is heard.

FL RATE (Flanger Rate) 0.05–10.0 Hz

Specify the modulation frequency of the flanger sound.

FL DEPTH (Flanger Depth) 0–127

Specify the modulation depth of the flanger sound.

FL FEEDBACK (Flanger Feedback) -98–+98%

Specify the proportion (%) of the flanger sound which will be returned to the input. Positive (+) settings will return the sound to the input with the original phase, while negative (-) settings produce an inverted phase.

FL BAL (Flanger Balance) D100:0E–D0:100E

Specify the volume balance between the enhancer sound that does not pass through the flanger and the enhancer sound that does pass through the flanger.

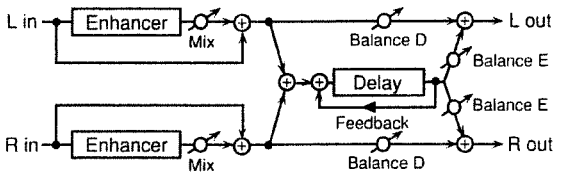
A setting of D100:0E will output only the enhancer sound, and a setting of D0:100E will output only the enhancer sound that is passed through the flanger.

LEVEL (Output Level) 0–127

Specify the output volume.

EH → DLY (Enhancer → Delay)

This effect connects an enhancer and delay in series.



EH SENS (Enhancer Sensitivity) 0–127

Specify the sensitivity of the enhancer.

EH MIX (Enhancer Mix Level) 0–127

Specify the volume of the overtones generated by the enhancer, relative to the original sound.

DLY TIME (Delay Time) 0.0–500 ms

Specify the time delay from the original sound until the delay sound is heard.

DLY FB (Delay Feedback) -98–+98%

Specify the proportion (%) of the delay sound that is to be returned to the input.

Positive (+) settings will return the sound to the input with the original phase, while negative (-) settings produce an inverted phase.

DLY HF (Delay HF Damp) 200–8000 Hz, BYPASS

Specify the frequency at which the high frequency range of the delayed sound returned to the input will be cut.

If you do not want the sound to be cut, select BYPASS.

DLY BAL (Delay Balance) D100:0E–D0:100E

Specify the volume balance between the enhancer sound that does not pass through the delay and the enhancer sound that does pass through the delay.

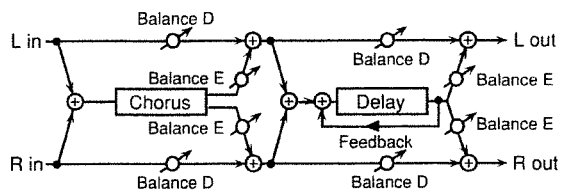
A setting of D100:0E will output only the enhancer sound, and a setting of D0:100E will output only the enhancer sound that is passed through the delay.

LEVEL (Output Level) 0–127

Specify the output volume.

CHO → DLY (Chorus → Delay)

This effect connects a chorus and a delay in series.



CHO PREDLY (Chorus Pre delay) 0.0–100 ms

Specify the time delay from the original sound until the chorus sound is heard.

CHO RATE (Chorus Rate) 0.05–10.0 Hz

Specify the modulation frequency of the chorus sound.

CHO DEPTH (Chorus Depth) 0–127

Specify the modulation depth of the chorus sound.

CHO BAL (Chorus Balance) D100:0E–D0:100E

Specify the volume balance between the original sound and the chorus sound.

With a setting of D100:0E only the original sound will be output, and with a setting of D0:100E only the chorus sound will be output.

DLY TIME (Delay Time) 0.0–500 ms

Specify the time delay from the original sound until the delay sound is heard.

DLY FB (Delay Feedback) -98–+98%

Specify the proportion (%) of the delay sound that is to be returned to the input.

Positive (+) settings will return the sound to the input with the original phase, while negative (-) settings produce an inverted phase.

DLY HF (Delay HF Damp) 200–8000 Hz, BYPASS

Specify the frequency at which the high frequency range of the delayed sound returned to the input will be cut.

If you do not want the sound to be cut, select BYPASS.

DLY BAL (Delay Balance) D100:0E–D0:100E

Specify the volume balance between the chorus sound that passes through the delay and the chorus sound which does not pass through the delay.

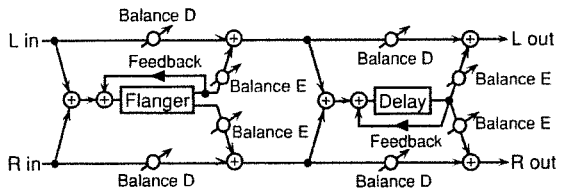
With a setting of D100:0E only the chorus sound will be output, and with a setting of D0:100E only the chorus sound that passes through the delay will be output.

LEVEL (Output Level) 0–127

Specify the output volume.

FL → DLY (Flanger → Delay)

This effect connects a flanger and a delay in series.



FL PRE DLY (Flanger Pre delay) 0.0–100 ms

Specify the time delay from the original sound until the flanger sound is heard.

FL RATE (Flanger Rate) 0.05–10.0 Hz

Specify the modulation frequency of the flanger sound.

FL DEPTH (Flanger Depth) 0–127

Specify the modulation depth of the flanger sound.

FL FEEDBACK (Flanger Feedback) -98–+98%

Specify the proportion (%) of the flanger sound that is to be returned to the input. Positive (+) settings will return the sound to the input with the original phase, while negative (-) settings produce an inverted phase.

FL BAL (Flanger Balance) D100:0E–D0:100E

Specify the volume balance between the original sound and the flanger sound.

With a setting of D100:0E only the original sound will be output, and with a setting of D0:100E only the flanger sound will be output.

DLY TIME (Delay Time) 0.0–500 ms

Specify the time delay from the original sound until the delay sound is heard.

DLY FB (Delay Feedback) -98–+98%

Specify the proportion (%) of the delay sound that is to be returned to the input. Positive (+) settings will return the sound to the input with the original phase, while negative (-) settings produce an inverted phase.

DLY HF (Delay HF Damp) 200–8000 Hz, BYPASS

Specify the frequency at which the high frequency range of the delayed sound returned to the input will be cut.

If you do not want the sound to be cut, select BYPASS.

DLY BAL (Delay Balance) D100:0E–D0:100E

Specify the volume balance of the flanger sound that passes through the delay and the flanger sound which does not pass through the delay.

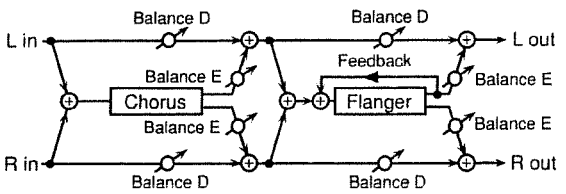
With a setting of D100:0E only the flanger sound will be output, and with a setting of D0:100E only the flanger sound that passes through the delay will be output.

LEVEL (Output Level) 0–127

Specify the output volume.

CHO → FL (Chorus → Flanger)

This effect connects a chorus and flanger in series.



CHO PREDLY (Chorus Pre delay) 0.0–100 ms

Specify the time delay from the original sound until the chorus sound is heard.

CHO RATE (Chorus Rate) 0.05–10.0 Hz

Specify the modulation frequency of the chorus sound.

CHO DEPTH (Chorus Depth) 0–127

Specify the modulation depth of the chorus sound.

CHO BAL (Chorus Balance) D100:0E–D0:100E

Specify the volume balance between the original sound and the chorus sound.

With a setting of D100:0E only the original sound will be output, and with a setting of D0:100E only the chorus sound will be output.

FL PRE DLY (Flanger Pre delay) 0.0–100 ms

Specify the time delay from the original sound until the flanger sound is heard.

FL RATE (Flanger Rate) 0.05–10.0 Hz

Specify the modulation frequency of the flanger sound.

FL DEPTH (Flanger Depth) 0–127

Specify the modulation depth of the flanger sound.

FL FEEDBACK (Flanger Feedback) -98–+98%

Specify the proportion (%) of the flanger sound that is to be returned to the input. Positive (+) settings will return the sound to the input with the original phase, while negative (-) settings produce an inverted phase.

FL BAL (Flanger Balance) D100:0E–D0:100E

Specify the volume balance between the chorus sound that passes through the flanger and the chorus sound that does not pass through the flanger.

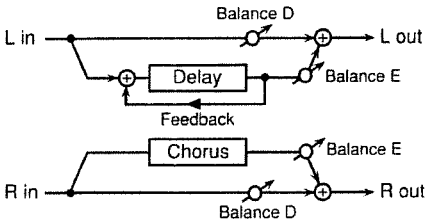
With a setting of D100:0E only the chorus sound will be output, and with a setting of D0:100E only the chorus that passes through the flanger sound will be output.

LEVEL (Output Level) 0–127

Specify the output volume.

CHO/DLY (Chorus Delay)

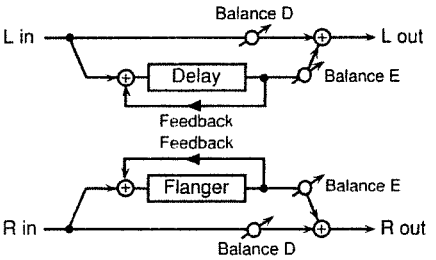
This effect connects a chorus and a delay in parallel.



* *The parameters that you can set are the same as for "CHO → DLY." However, the Delay Balance setting determines the balance level for the original sound and the delayed sound.*

FL/DLY (Flanger Delay)

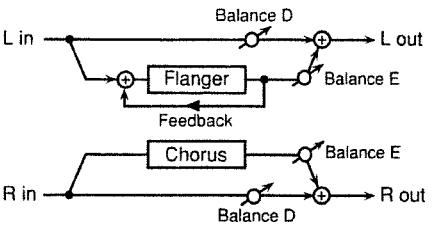
This effect connects a flanger and a delay in parallel.



* *The parameters that you can set are the same as for "FL → DLY." However, the Delay Balance setting determines the balance level for the original sound and the delayed sound.*

CHO/FL (Chorus Flanger)

This effect connects a chorus and a flanger in parallel.



* *The parameters that you can set are the same as for "CHO → FL." However, the Flanger Balance setting determines the balance level for the original sound and the flanger sound.*

Chapter 8 Changing Performance Instruments

You can change the instrument (tone) used for each of the "DRUM," "BASS," "INST 1," "INST 2" Parts, and substitute it with a different instrument (tone).

Each one of these instrument sounds is called an **Instrument**. Switch these Instruments to change the instrument sounds used in a Performance.

To save the modified settings

If you modify the settings of a user song, the modified content will be lost when you switch to another song/style.

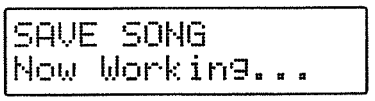
If you wish to keep the settings, use the following procedure.

1. **Press [REC], getting the button to light.**

   * *To cancel, press [EXIT].*

2. **Press [STOP].**

   The following screen will appear, and the settings will be saved.

   When the settings have been saved, you will return to the previous screen.

NOTE

Never turn off the power to the JS-5 or remove the memory card from the JS-5 while the " ▢ " still appears at the left of the display (when data is being written), as this can prevent the data from being written properly, and may adversely affect later operations.

MEMO

If you have changed the settings for the Preset Songs, then if you want to save the settings, copy them to a User Song (p. 82).

HINT

If you press [SHIFT] + [REC], the settings will be saved immediately.

Changing Drum Part Instruments

When you want to change the drum sounds used for the Drum Parts, switch the **Drum Kit**. Drum Kits are groupings of a number of different percussion instrument sounds.

"Drum Kit List " (p. 144)

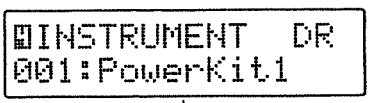
1. **Select a Song.**

2. **Press [PART].**

3. **Press [CURSOR] to select "4 INSTRUMENT."**

4. **Press [DRUM], getting the button to light.**

   The Drum Part is selected.

   Drum Kit

5. **Turn [VALUE] to select the Drum Kit.**

   * *If you press [START], you can select the Drum Kit while listening to the performance.*

6. **Once you have finished making the settings, press [PART] once more, or press [EXIT].**

   The original screen reappears.

   * *If you wish to save the settings, execute the Save procedure.*

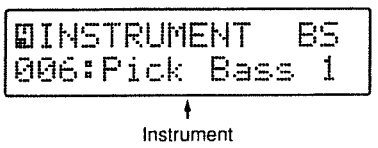
Changing Bass Part Instruments

Change the Instrument used for the Bass Part with a different Instrument.

* *Some of the instruments are played monophonically.*

"Instrument List" (p. 143)

1. **Select a Song.**
2. **Press [PART].**
3. **Press [CURSOR] to select "4 INSTRUMENT."**
4. **Press [BASS], getting the button to light.**
   The Bass Part is selected.



5. **Turn [VALUE] to select the Instrument.**

* *If you press [START], you can select the Instrument while listening to the performance.*

6. **Once you have finished making the settings, press [PART] once more, or press [EXIT].**
   The original screen reappears.

* *If you wish to save the settings, execute the Save procedure (p. 109).*

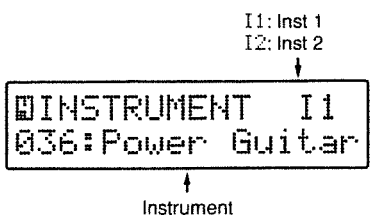
Changing INST Part Instruments

Change the Instrument used for the INST 1 or INST 2 Part with a different Instrument.

* *Some of the instruments are played monophonically.*

"Instrument List" (p. 143)

1. **Select a Song.**
2. **Press [PART].**
3. **Press [CURSOR] to select "4 INSTRUMENT."**
4. **Press [INST 1] or [INST 2], getting the button to light.**
   The INST 1 or INST 2 Part is selected. Buttons other than that for the selected Part flash.



5. **Turn [VALUE] to select the Instrument.**

* *If you press [START], you can select the Instrument while listening to the performance.*

6. **Once you have finished making the settings, press [PART] once more, or press [EXIT].**
   The original screen reappears.

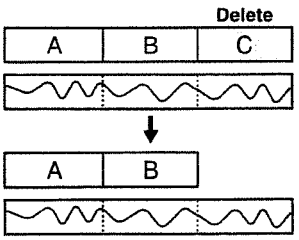
* *If you wish to save the settings, execute the Save procedure (p. 109).*

Chapter 9 Recording Your Own Performances

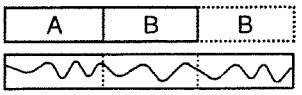
This chapter explains the procedures used for recording guitar performances, vocals, or other input to the User Song Audio track.

Notes

- **You should record audio onto the audio track after you have finished recording/editing the User Song.**
- **If you've selected a User song containing no recorded data, and have recorded audio to it, you may find that afterwards, when you try to record Forms/Chords, you are unable to do so. In this case, delete the recorded audio data, then after recording the Forms/Chords, go on to record the audio over again.**
- **You will be unable to record audio on the JS-5 when six User Songs containing audio data have already been recorded.**
  To remedy this situation, you can delete unneeded audio data. You will be able to record audio (p. 81).
- **Audio data is saved in the same memory as the song (USER or CARD) that was selected for recording.**
- **If after recording you edit the user song and change the number of measures, editing operations other than Erase (p. 114) cannot be performed on the audio data. This will mean that the number of measures in the song will be different than the number of measures of audio data.**



- **If you playback a song for which the number of measures is shorter than the number of measures of audio data, the last measure of the song will be played back repeatedly until the audio data has finished playing.**



- **If you have set Sync mode (p. 133) so that the JS-5 will playback in synchronization under control from an external MIDI device, it is not possible to record on the audio track.**

Before Recording

Before you begin to record, here is an explanation of recording time and the parameters that are set during the recording process.

About Recording Time

■ The following shows the recording time available using the User Memory.

Hi-Fi: 1 minute, 35 seconds

LONG: 1 minute, 58 seconds

* *You can record up to six songs, within the time shown above.*

■ Data can be recorded to memory cards (SmartMedia) in the following cases.

	32 MB	64 MB
Hi-Fi	27 minutes, 14 seconds	54 minutes, 31 seconds
LONG	34 minutes, 2 seconds	68 minutes, 9 seconds

* *Depending on the amount of data saved to the memory card, the available recording time for the audio data may be less than shown above.*

* *The listed recording times are applicable to recordings of a continuous nature. The available recording time decreases considerably if you record numerous short segments of audio data (each lasting in the range of several seconds).*

MEMO

Purchase SmartMedia at your local computer dealer or digital-camera vendor.

* ***The JS-5 can use 8 MB to 64 MB SmartMedia with a power-source voltage of 3.3 V.***

* ***Roland S2M-5/S4M-5 SmartMedia cannot be used.***

Selecting the Recording Input

Switch the REC INPUT switch to match the device connected to the REC INPUT jack.

GUITAR: When an electric guitar (or bass) is connected, or when an electric guitar (or bass) and an effects processor are connected
(The Guitar Amp Simulator is working.)

LINE: When an electric acoustic guitar is connected, or when a keyboard is connected

MIC: When a microphone is connected

Selecting Between Audio Quality

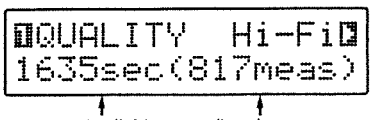
When recording, select whether to give priority to audio quality or recording length in the Recording Quality Selection screen.

Hi-Fi: Select this to record with high sound quality.

LONG: Select this when you want to increase the amount of time for recording.

Checking the available recording time

When the audio track record standby screen (p. 112) is displayed, you can press [CURSOR ►] several times to access the following screen.



Available recording time and maximum number of measures

In this screen, you can verify the available recording time and number of measures at the selected recording quality.

* *Understand that the indicated time is merely an estimate, and as such includes a certain margin for error.*

By pressing [LONG REC] to switch the recording quality, you can compare the available recording time for "LONG" and "Hi-Fi."

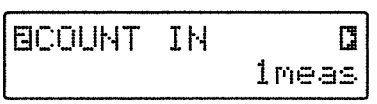
* *You cannot change the recording mode if there is audio data already recorded to the Selected song.*

Count-In Settings

When the audio track record standby screen is displayed, you can press [CURSOR ►] several times to access the count-in setting screen.

Setting the count-in to "1meas" (measure) or "2meas" (measures) in the Count-In settings screen enables you to begin recording after a count-in is played.

Adding the count-in allows you to confirm the starting point and the tempo used for the recording.



* *The count-in is sounded when you begin recording from the top of the song (the first measure). The count-in is not sounded when you start recording at a point later in the song, even if you've set it so a count-in is to be played. When starting audio recording at a point in the song other than the beginning, you can have the song be played instead of a count-in at the lead-up to recording by setting the point where the song starts playing at a point several measures before the start of recording.*

Recording Operations (New Recordings)

1. **Select the User Song to be recorded.**

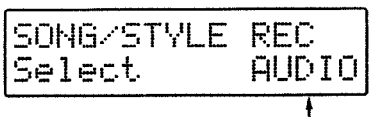
* *You can't select User Songs stored on memory cards if no card is inserted.*

2. **Adjust the tempo as needed (p. 60).**

3. **Press [REC], getting the button to light.**

[SONG], [CHORD], and [AUDIO TRACK] flash, and the Recording Track Selection screen appears.

* *When a User Style is selected, [STYLE] flashes.*

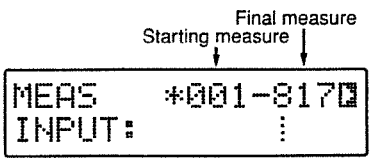


Recording Track

* *To cancel, press [EXIT].*

4. **Press [AUDIO TRACK] to select the Audio Track.**

The Record Standby screen for the Audio Track appears.



* *If the song contains no audio data, "*" appears in the display.*

5. **Use [CURSOR] and [VALUE] to set the starting and final measures of the range to rerecorded.**

* *You cannot set the starting measure for rerecording at an earlier point than the starting measure of the performance (the measure indicated in the left display).*

* *By pressing [FWD] [RWD] or [RESET] you can change the measure at which the playback will begin. However, it is not possible to set this later than the recording start measure.*

6. **Press [LONG REC] to select the recording mode.**

Hi-Fi: Select this to record with high sound quality.

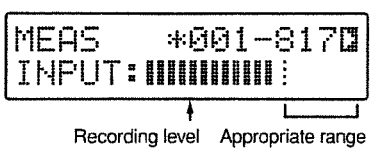
LONG: Select this when you want to have more time for recording.

When "LONG" is selected, [LONG REC] lights up.

- If you press [CURSOR ►] several times to select "1 QUALITY," you can check the available recording time.(p. 112)
- If you press [CURSOR ►] several times to select "2 COUNT IN," you can make count-in settings. (p. 112)

7. Adjust the recording level.

Play your guitar, and turn [REC LEVEL] to adjust the recording level of the sound that is input to REC INPUT so that the "▮" at the far right of the level meter is displayed within the appropriate range of levels (see diagram below).

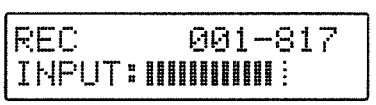


8. Press [START].

The Audio Track's Recording screen is displayed, and recording begins. [REC] lights up.

When the count-in is selected, the count-in is indicated in the left display while the count sound plays simultaneously.

After the count-in is displayed, recording begins.



9. Once you have finished recording, press [STOP].

[REC] goes dark, and the Song screen reappears.

Playback

Press [START] in the Song screen, getting the button to light. The audio data is played back in time with the performance.

* *You can adjust the volume at which the audio data will be played back. (p. 83)*

* *Although the audio data is synchronized even when the tempo is changed, increasing or decreasing the tempo by a factor of two causes the data to be played back incorrectly.*

* *With some forms of audio data, slowing down the tempo can make it appear that the sound has delay added to it; whereas with the tempo increased, some sounds may seem to be interrupted.*

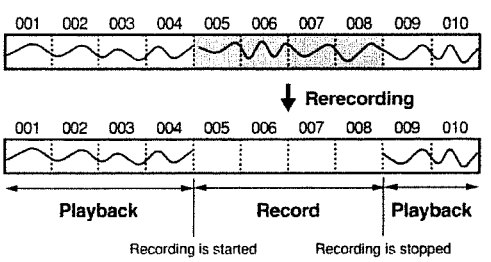
* *When playing User Songs to which audio data has been recorded, the audio data may not be played back correctly if [START] is pressed too quickly after the [STOP], [RESET], [RWD], or [FWD] buttons are pressed. In this case, the message "Operate Slowly!" appears in the display.*

Redoing a Recording (Rerecording)

If you are unable to get a good recording of a performance, you can record the performance over again (rerecord).

Since rerecording is executed over a specified range in measure units, you can **rerecord only over a range of several measures** or **specify all measures and rerecord from the beginning of the performance**.

When rerecording, the Audio track is played back while recording is started and then stopped after the specified number of measures, after which the performance switches to Play mode.



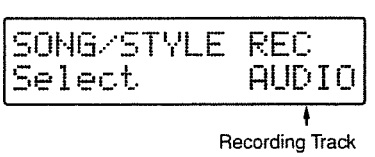
1. Select the User Song to be rerecorded.

* *You can't select User Songs stored on memory cards if no card is inserted.*

2. Press [REC], getting the button to light.

[SONG], [CHORD], and [AUDIO TRACK] flash, and the Recording Track Selection screen appears.

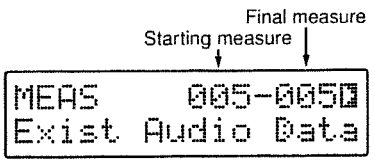
* *When a User Style is selected, [STYLE] flashes.*



* *To cancel, press [EXIT].*

3. Press [AUDIO TRACK] to select the Audio Track.

The following screen appears, and the measure where recording begins flashes.



4. Use [CURSOR] and [VALUE] to set the starting and final measures of the range to be rerecorded.

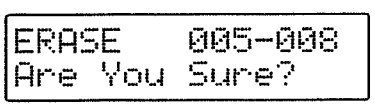
* *You cannot set the starting measure for rerecording at an earlier point than the starting measure of the performance (the measure indicated in the left display).*
* *By pressing [FWD] [RWD] or [RESET] you can change the measure at which the playback will begin. However, it is not possible to set this later than the recording start measure.*

5. Press [START].

Since the measures specified in Step 4 already contain audio data, you first move to the audio data delete screen.

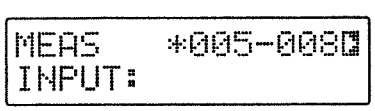
A confirmation screen appears, asking if it is all right to erase the audio data in the specified range.

* *If you have used the foot switch to start, the audio data in the specified range will be automatically erased and the Record Standby screen will appear.*
* *To cancel, press [EXIT].*

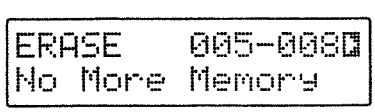


6. Press [ENTER] to erase the data.

The audio data is erased, and the Record Standby screen appears.



When the range to be rerecorded exceeds the number of measures available for recording, the following screen appears.



In this case, use [CURSOR] and [VALUE] to bring up the Record Standby screen, then alter the starting and ending measures of the segment to be rerecorded.

* *If you do not want to change the range of measures to be rerecorded, you can delete audio data recorded in another song, thus increasing the number of measures available for recording.*

7. Press [RWD], [FWD], and [RESET] as needed to set the starting measure for the performance.

* *The starting measure for the performance cannot be set at a point later than the starting measure for recording.*

8. Press [START] and recording begins.

When the count-in is selected, the count-in is indicated in the left display while the count sound plays simultaneously.

After the count-in is displayed, recording begins.

The previously recorded performance is played back. By playing along with these sounds, the new recording is made only in the specified range.

9. Once you have finished recording, press [STOP].

[REC] goes dark, and the Song screen reappears.

HINT

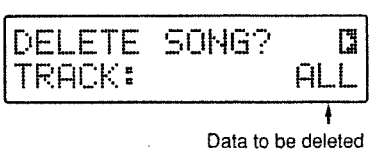
If you wish to erase only a portion of the audio data, perform steps 1–6 for rerecording and then press [STOP].

Deleting the Recorded Data

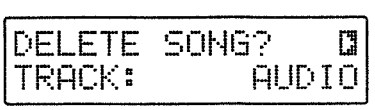
Use the following procedure to delete all audio data in the currently selected User Song.

1. At the Song screen, press [ERASE] ([SHIFT] + [UTILITY]).

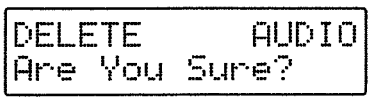
The Delete screen for Song appears.



2. Turn [VALUE] to select "AUDIO."

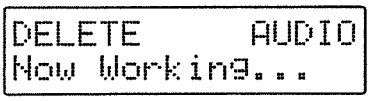


3. **Press [ENTER].**
   A screen prompting you to confirm deletion of the audio data appears.



* *To cancel, press [EXIT].*

4. **To delete the data, press [ENTER].**
   The audio data is deleted.
   The following screen appears.

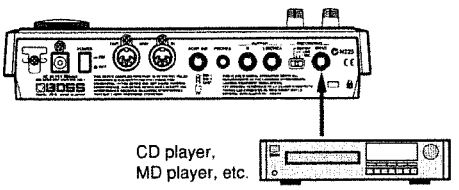


When the delete is finished, the display will indicate "Completed!"

Using the JS-5 as a Phrase Trainer

By recording sounds from CDs, MDs, or other sources to the Audio track, you can then use the JS-5 as a convenient "phrase trainer" for copying and repeated practice of difficult passages. Adjusting the tempo also allows you to play back rapid phrases at slower tempos.

Connections



* *REC INPUT in a monaural input for use with standard plugs. If the device that you want to connect has stereo output, connect the device to either of the L or R jacks.*

Recording

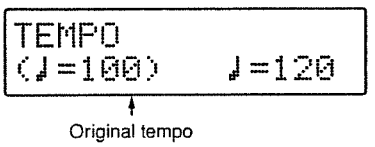
Procedures are the same as those in "Recording Operations (New Recordings)" (p. 112).

- Songs are played during recording (and playback); mute the Drum-INST 2 Parts (for procedures: p. 63).
- Set the tempo at or near 120 (for procedures: p. 60).

Confirming the Tempo Used for Recording

When you select a song with audio data recorded to it, you can check the tempo used when that audio data was recorded.

1. **Press [TEMPO], getting the button to light.**



When [ENTER] is pressed, the current tempo is set to the same value as that of the original tempo.

* *You cannot change the original tempo.*

Chapter 10 Various Performance Techniques

Repeatedly Playing Back a Song (Loop Play)

You can have a specified range of measures play back repeatedly. This is called "Loop Play."

You can set two looped segments (Loop 1 and 2) in any one Song.

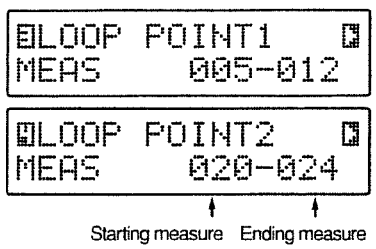
■ **Pressing [LOOP 1] ([LOOP 2]) alternately switches the loop on (lit) and off (dark).**

* *This describes the procedures for setting up Loop 1. If setting Loop 2, just substitute "LOOP 2" for "LOOP 1" where it appears in the following text.*

1. Select a Song.

* *If no memory card is inserted, then you can't select "CARD" even when you press [CARD].*

2. Press [CURSOR] and select "3 LOOP POINT 1" for Loop 1, or "4 LOOP POINT 2" for Loop 2.



3. Use [CURSOR] and [VALUE] to change the starting point and ending point of the loop.

NOTE

If you wish to save the settings, execute the Save procedure (p. 109).

* *If you record a User Style before saving the Loop settings, these settings are then deleted.*

NOTE

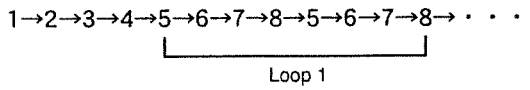
Never turn off the power to the JS-5 or remove the memory card from the JS-5 while the " " still appears at the left of the display (when data is being written), as this can prevent the data from being written properly, and may adversely affect later operations.

MEMO

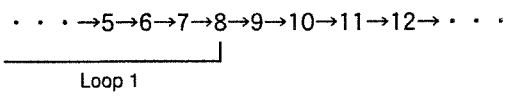
If you have changed the settings for the Preset Songs, then if you want to save the settings, copy them to a User Song (p. 82).

How to Play Loops

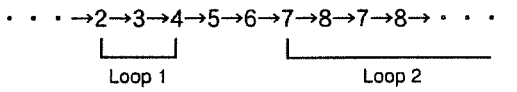
For example, if a Song has Measure 5 through Measure 8 set as Loop 1, and you start playing the Song from the beginning, the Song progresses as shown below.



When you press [FWD] or the foot switch (when set to EXIT LOOP: p. 117) while the loop is playing, then once the end of Loop 1 is reached, the loop is exited, and the Song continues from Measure 9.



To take another example, if Measures 2-8 are set as Loop 1 and Measures 7 and 8 are set as Loop 2, and you press [START] or the foot switch (when set to EXIT LOOP: p. 117) while Loop 1 is playing the loop is playing, then the performance plays to the end of Loop 1, Measures 5 and 6 are played, and then Loop 2 begins.



* *If you loop-playback a song in which audio data was recorded, the audio data in the final part of the looped interval is not played back. Furthermore, setting the tempo significantly fast or slow may produce the impression that the sound is being interrupted.*

HINT

Pressing [SHIFT]+[LOOP 1]([LOOP 2]) when song playback is stopped will set the current measure as the loop start/end measure. (The loop button will blink.)

* *To cancel, press [STOP]. (The setting will be changed.)*

Next, press [FWD] to change measures, and press [LOOP 1] ([LOOP 2]) to set that measure as the last measure of the loop. (The loop button will light.)

Using the Foot Switch to Start/Stop Playback

With a foot switch (such as the optional FS-5U) connected to the FOOT SW jack on the JS-5's rear panel, you can use your foot to start and stop performances.

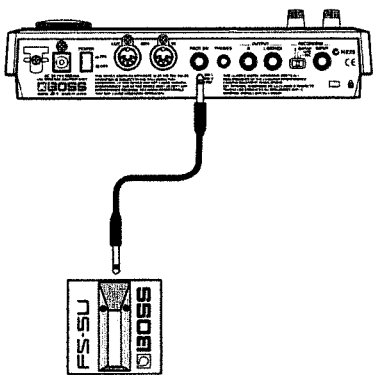
Additionally, by using a special cable (the optional PCS-31), you can then connect two foot switches.

How to Connect the Foot Switch

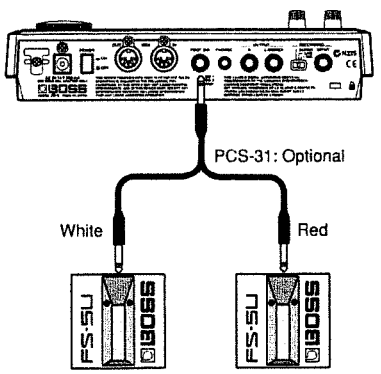
NOTE

To prevent malfunction, speaker damage, or other such problems when connecting the foot switch to the JS-5, be sure to completely turn down the volume of all connected devices and turn off the power first.

When Connecting One Foot Switch

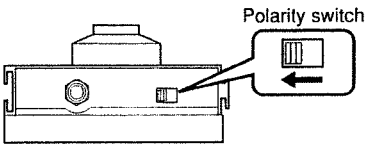


When Connecting Two Foot Switches



* *Connect FOOT SWITCH 1 to the plug with the white band and FOOT SWITCH 2 to the plug with the red band.*

* *When connecting a foot switch (the optional FS-5U) to the FOOT SW jack, set the polarity switch as shown below.*



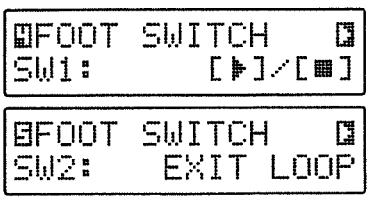
Setting Foot Switch Functions

This selects the function performed when FOOT SWITCH 1 or FOOT SWITCH 2 is pressed.

You can set FOOT SWITCH 1 and 2 to perform either the same or different functions.

* *When only one foot switch is connected, this applies to FOOT SWITCH 1.*

1. **Press [UTILITY].**
2. **Press [CURSOR] and select "4 FOOT SWITCH 1" or "5 FOOT SWITCH 2."**



3. **Turn [VALUE] to select the foot switch function.**

[▶]/[■] (Start/Sop):

Pressing the foot switch when the performance is stopped begins the performance; pressing the foot switch when the performance is playing stops the performance.

[|◀] [▶]/[■] (Reset & Start/Sop):

Pressing the foot switch when the performance is stopped begins the performance; pressing the foot switch when the performance is playing stops the performance and returns you to the beginning of the song.

EXIT LOOP:

Pressing the foot switch during the performance causes you to exit the loop.

FORM INTRO-ENDING:

When you press the foot switch during your performance, the button of the specified form will blink (standby), and the specified form will be selected at the next measure.

MUTE DRUM–AUDIO TRACK:

Each time you press the foot switch,, the specified part will switch between "mute (silent)" and "un-muted (sounding)."

The button will be dark when muted, and lit when sounding.

4. **Once you have finished making the settings, press [UTILITY] once more, or press [EXIT].**

   The original screen appears.

Chapter 11 Creating User Styles

You can create and store up to maximum 20 different User Styles. Just as with the Preset Styles, each Style eight Forms can be used in the composition of each Style.

Recording of User Styles can also be done using **Realtime Recording.**

Although you can record performances just as they are played using Realtime Recording, **you cannot conduct Realtime Recording using the JS-5 by itself.**

Record performance patterns by playing a MIDI keyboard connected to the JS-5's MIDI IN connector.

MEMO

The force with which the keys of the MIDI keyboard are pressed (the velocity) is recorded in eight levels.
Only note information (p. 131) is recorded to the User Style.

NOTE

Never turn off the power to the JS-5 or remove the memory card from the JS-5 while the " ▢ " still appears at the left of the display (when data is being written), as this can prevent the data from being written properly, and may adversely affect later operations.

Points to Note When Creating User Styles

To ensure that the User Song correctly plays the chord progression specified on the Chord track, create your performance data using chords with "C" as the root or phrases in the key of "C."

This way, the Arranger function converts the various chords based on the sounds being in the key of "C" or on "C" chord sounds.

When only chords are being played, such as with chord backing, create the performance data using chords with "C" as the root (examples of such chords include "C6" (C, E, G, A) and others). This way, when the "ARPEGGIO" settings in **Arrange mode (refer to the following)** are selected, the sounds in the performance data are arranged to fit the notes making up the chords. However, using these Arrange mode settings does not allow you to play notes other than those making up the chords.

Using a different technique, though, you can not only compose chords, but also play melodious phrases that match the chord progression. In this case, phrases are created in the key of "C." This way, when the "OBBLIGATO" is selected in Arrange mode, the sounds in the performance data are arranged to fit the scales of the notes making up the chords. However, since the "OBBLIGATO" settings allow you to play notes other than those making up the chords, there may be times when, depending on the data, you may not be able to get a sense of the chords being played.

* *When playing Styles exactly as composed, that is without the chords being converted, input N.C. (Non-Chord Type) to the Chord track (p. 72). Doing this allows you to create songs using each Style as an independent pattern. However, this uses more Styles than in Songs where the chords are converted, so this method also consumes that much more memory.*

About Arrange Mode

You can change the way Chords are converted (the arrangement) by setting the User Style to Arrange mode.

* *You cannot change the Arrange mode of the Drum Parts (this is fixed at NO ARRANGE).*
* *Suitable Arrange modes have been selected for the Preset Styles. When changing the Arrange mode of a Preset Style, make these changes after first copying (p. 124) the Preset Style to the User Styles.*

NO ARRANGE:

Performance data on tracks set to "NO ARRANGE" is performed just originally played, with no arranging (Chord conversion). Drum Parts are held to this mode.

BASS:

This setting is meant for bass performances. Just as with "OBBLIGATO," notes in the performance data are automatically shifted to notes in scales matching the Chords.

Furthermore, notes higher than those in the bass registers are shifted down an octave. Additionally, when On-Bass Chord is selected, the root tone is transposed to the bass note.

OBBLIGATO:

This is best for Performances including melodious phrases. The notes in the performance data are shifted to notes in scales matching the Chords.

ARPEGGIO:

This is good for arpeggios and Chords. The notes in the performance data are converted to notes in the Chords that are input. This mode plays other converted notes that are not central to the chord.

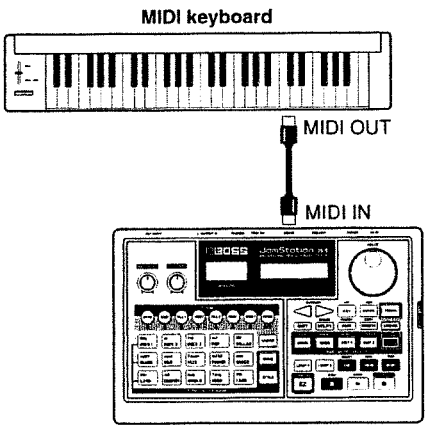
* *If you do not want to send all of the on the Style's Performance track performance data through the Arranger, input "C" for the Chord track and "N.C (- -)" for the Chord type. N.C sets the Style to play the Chords just as they are in the performance data, without converting the Chords.*
* *Inputting N.C. (Non-Chord Type) to the Chord track disables the Arrange mode settings for the Style being performed.*

During Recording, you can use the **Metronome** feature. For more on how to use the Metronome, refer to "Changing the Metronome Settings" (p. 128).

* *With the factory settings, the metronome will sound.*
* *The sound of the Drum Kit selected for the Drum part is used as the Metronome sound.*
  Thus, even when the Metronome sound is set to be played, no sound is played if the Drum part is muted.
  Furthermore, the sound of the Metronome may change if the Drum Kit is switched.

Preparing to Record

First connect the JS-5 to a MIDI keyboard and set the MIDI channels (p. 131) to the part you want record.



* *Only connect the MIDI OUT of the external MIDI device to the JS-5's MIDI IN.*
  If each device's MIDI OUT is connected to the other's MIDI IN, the MIDI information is looped, and the User Style may not be recorded correctly.

Part	MIDI channel
Drum	10
Bass	2
Inst 1	3
Inst 2	4

Recording Operation

* *Note that, even if you don't actually record anything, you will cause a reduction in the amount of memory that remains available anytime you go into the User Style recording-standby screen, even though you've pressed [STOP] to stop the recording process.*

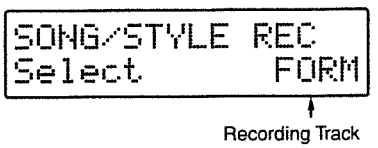
1. Select the User Style for recording destination.

1) Press [STYLE], getting the button to light.
2) Press [USER] or [CARD], to switch to "USER" (the JS-5) or "CARD" (memory card).
   * *If no memory card is inserted, then you can't select "CARD" even when you press [CARD].*
3) Turn [VALUE] to select a Style number.

2. Press [FORM] to select the Form to be recorded.
The button for the selected Form flashes.

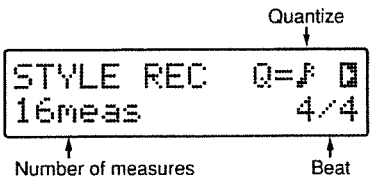
3. Press [REC], getting the button to light.
[SONG], [STYLE], [CHORD], and [AUDIO TRACK] flash, and the Recording Track Selection screen appears.

* *The button for the selected form may temporarily go out.*
* *When a Preset Song is selected, [STYLE] lights up only.*



* *To cancel, press [EXIT].*

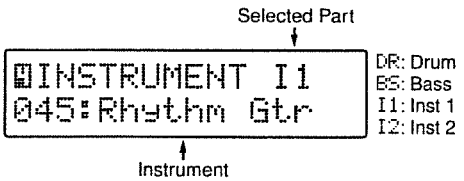
4. Press [STYLE].
The User Style's Record Standby screen appears.



5. Set the MIDI channel of the MIDI keyboard to the same number as that of the Part to be recorded.

6. Press [PART].

7. Press [CURSOR] to select "4 INSTRUMENT."



8. **Turn [VALUE] to select the Instrument (Drum Kit).**

9. **Once you have finished making the settings, press [PART] once more, or press [EXIT].**

10. **Use [CURSOR] and [VALUE] to set Quantize.**

The **Quantize** here corrects discrepancies in the timing during recording of fill-ins and breaks, with the timing set to the selected note length. When set to "- -," the data is recorded with the exact timing at which the button is pressed.

Display	Quantize	Display	Quantize
♩	Quarter note	♩3	8th note triplets
♩3	Quarter note triplets	𝅘𝅥𝅯	16th note
♪	8th note	- -	no quantize

11. **Use [CURSOR] and [VALUE] to select the Form length.**

Settings values: 1-16

The Form length is set in units of one measure.

* *This cannot be changed if any data is already recorded.*

12. **Use [CURSOR] and [VALUE] to select the beat for the Form.**

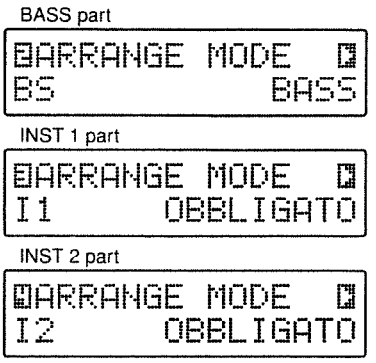
Settings values: 2/4–16/4, 5/8–16/8

* *Only one beat can be set for a Style. You cannot set different beats for each Form.*

* *This cannot be changed if any data is already recorded.*

If setting a Drum Part, go to Step 15.

13. **Press [CURSOR] several times to access the Arrange mode setting screen for the part that you wish to record.**

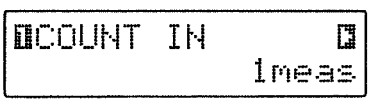


14. **Turn [VALUE] to set the Arrange mode.**

Settings values: NO ARRANGE, BASS, OBBLIGATO, ARPEGGIO

"About Arrange Mode" (p. 119)

15. **Press [CURSOR ◄] several times to select "1 COUNT IN."**



16. **Turn [VALUE] to select the count-in.**

Settings values: OFF, 1meas, 2meas

When using the count-in, set this to "1meas" (measure) or "2meas" (measures).

When not using the count-in, set this to "OFF."

17. **Press [START].**

The Part's Realtime Recording screen is displayed, and recording begins.

When the count-in is selected, the count-in is indicated in the left display while the count sound plays simultaneously. After the count-in is displayed, recording begins.

18. **Play the MIDI keyboard and record the sounds.**

With Drum Parts, the Rhythm Instruments are recorded when the MIDI keyboard is played.

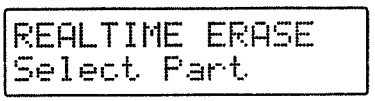
The currently selected Drum Kit Rhythm Instrument corresponding to the key played (Note Number) is recorded.

■ During recording, loops are played according to the length specified in the Form.

For more on the correspondence between Note Numbers and Rhythm Instruments, refer to "Drum Kit List" (p. 144).

Erasing a performance

If you wish to erase a recorded performance, press [ERASE] ([SHIFT] + [UTILITY]) to access the following screen.



Now when you press [DRUM]–[INST 2], the performance of the part whose button you pressed will be erased.

Also, by pressing a key on the MIDI keyboard (this may be any key), you can erase the performance of the part on the same channel as the MIDI keyboard for the duration the key is held down.

With the Drum part, you can erase only the sound of the Rhythm Instrument corresponding to the key pressed (the note number).

When you have finished erasing the performance, press [EXIT].

19. Once you have finished recording, press [STOP].

The display returns to the Record Standby screen for the Style.

Deleting a User Style/Deleting Data of the Specified Form

Here's how you can delete the selected user style.

It is also possible to delete only the data of the specified form.

1. Select the User Style whose data you wish to delete.

2. While play is stopped, press [ERASE] ([SHIFT] + [UTILITY]).

3. Press [CURSOR ►] to select "DELETE STYLE?"

The Style's delete screen appears.

Data to be deleted

4. Turn [VALUE] to specify the data to be deleted.

ALL:

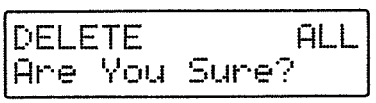
Delete the selected User Style.

INTRO–ENDING:

Delete the data of the selected Form.

5. Press [ENTER].

The delete confirmation screen appears.



* *To cancel, press [EXIT].*

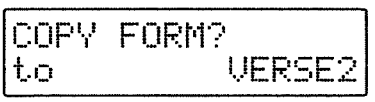
6. Press [ENTER] to erase the data.

The delete will be executed, and when it is finished the display will indicate "Completed!"

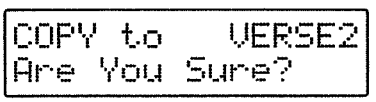
Copying Forms

This copies the content of the currently selected Form and copies it to another Form in the same Style.

1. **Display the User Style's Record Standby screen. (p. 120)**
2. **Press [COPY] ([SHIFT] + [EFFECTS]).**
   The Form's copy screen appears.



3. **Turn [VALUE] to select the copy-source Form.**
4. **Press [ENTER].**
   The copy confirmation screen appears.



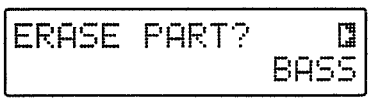
* *To cancel, press [EXIT].*

5. **Press [ENTER] when you want to execute the copy.**
   The copy will be executed, and when it is finished the display will indicate "Completed!"

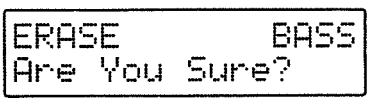
Erasing Parts

This erases the content of a specified Part (except the Audio track) in the currently selected Form.

1. **Display the User Style's Record Standby screen. (p. 120)**
2. **Press [ERASE] ([SHIFT] + [UTILITY]).**
3. **Press [CURSOR ►] to select "ERASE PART?"**
   The Part's erase screen appears.



4. **Turn [VALUE] to select a Part.**
5. **Press [ENTER].**
   The erase confirmation screen appears.



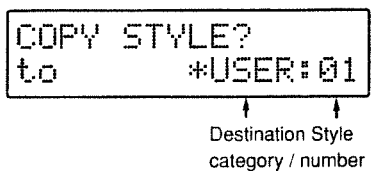
* *To cancel, press [EXIT].*

6. **Press [ENTER] to erase the data.**
   The erase will be executed, and when it is finished the display will indicate "Completed!"

Copying Styles

This copies a Style (Preset or User) to the User Styles.

1. **While play is stopped, press [COPY] ([SHIFT] + [EFFECTS]).**
2. **Press [CURSOR ►] to select "COPY STYLE?"**
   The Style's copy screen appears.



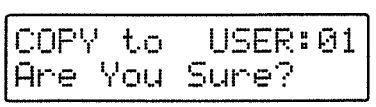
3. **Select the User Song to be used as the copy destination.**

- Use [CURSOR] and [VALUE] to select "USER" (the JS-5) or "CARD" (memory card).

* *If no memory card is inserted, then you can't select "CARD" even when you press [CARD].*

- Use [CURSOR] and [VALUE] to select a Style number.

4. **Once you have decided on a number, press [ENTER].**
   The copy confirmation screen appears.



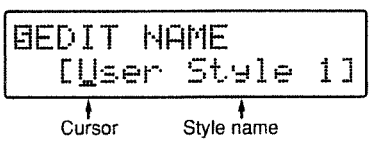
* *To cancel, press [EXIT].*

5. **Press [ENTER] when you want to execute the copy.**
   The copy will be executed, and when it is finished the display will indicate "Completed!"

Naming the Style

This adds names (Style names) to the Styles you create.

1. **Select the User Style to be named.**
2. **Display the User Style's Record Standby screen.** **(p. 120)**
3. **Press [CURSOR ►] several times to select "5 EDIT NAME?".**
   The Style Name input screen appears.



4. **Use [CURSOR] and [VALUE] to input the characters.**

- If you press [SHIFT] + [◄], the cursor will move to the beginning of the name.
- If you press [SHIFT] + [►] , the cursor will move to the end of the name.
- If you press [INSERT] ([SHIFT] + [PART]), a space will be inserted at the cursor location.
- If you press [ERASE] ([SHIFT] + [UTILITY]), the character at the cursor location will be deleted, and subsequent characters will be moved toward the left to fill the gap.
- If you hold down [SHIFT] and turn [VALUE], uppercase / lowercase / symbols / (space) / numerals will be displayed.

5. **Repeat Step 4 as needed.**

* *Press [EXIT] to return to the User Style's Record Standby screen.*

6. **To end the procedure, press [STOP].**

Chapter 12 Using Memory Cards

You can do the following by using optional memory cards (SmartMedia) with the JS-5.

- **You can save up to maximum100 User Songs (including audio data) and up to maximum 20 different User Styles.**

  User Songs and User Styles stored on memory cards can be handled just like the User Songs and User Styles stored in the User Memory.
- **You can save the entire collected data and all of the JS-5's settings, including the system settings, to a memory card, and then restore (load) them to the JS-5 whenever necessary.**

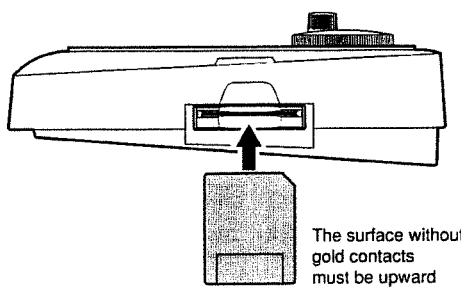
Handling Memory Cards

MEMO

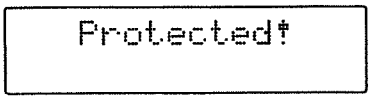
Purchase SmartMedia at your local computer dealer or digital-camera vendor.

- ***The JS-5 can use 8 MB to 64 MB smart media with a power-source voltage of 3.3 V.***
- ***Roland S2M-5/S4M-5 SmartMedia cannot be used.***

■ Insert memory cards in the MEMORY CARD slot only when the performance of a Song is stopped.



- *Insert memory card so that the surface with the (gold) contacts is not facing up.*
- *Insert the card firmly and completely in the slot.*
- *Do not the card contacts, or allow them to become dirty or grimy.*
- *Never remove the memory card or turn off the power to the JS-5 when carrying out an operation involving the card (such as formatting or reading and writing data); this may ruin your data, or even render the card unusable.*
- *Attaching a Write Protect sticker to the Write Protect area on a card disallows formatting and writing of data to the card. For more detailed information about the Write Protect sticker, refer to the owner's manual provided with the memory card. If you attempt to format or write data to a card that has a Write Protect sticker attached, the following screen appears.*



Initializing the Memory Card

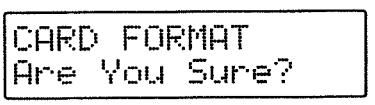
Memory card must be formatted before they can be used for the JS-5.

Furthermore, cards already used in a JS-5 that have been cleared of data must also be formatted.

1. **Press [UTILITY].**
2. **Press [CURSOR] to select "12 CARD FORMAT?".**

3. **Press [ENTER].**

   The Format Confirmation screen appears.



* *To cancel, press [EXIT].*

4. **Press [ENTER] to begin formatting the card.**

   The following screen appears, and the formatting process starts.

When the format is finished, the display will indicate "Completed!"

Saving All the JS-5's Settings to the Card

This saves all the data in the User Memory and System Memory settings in one file. This file is called the **"Backup File"**.

You can save up to maximum ten Backup Files.

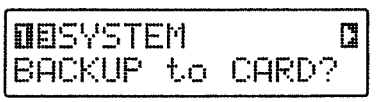
* *The number of backup files that can be stored on a memory card will differ depending on the capacity of the card.*
* *The backup files are given file names—BACKUP01 through BACKUP10. These file names cannot be changed.*

1. Make sure that a cord is inserted in the MEMORY CARD slot.

2. Press [UTILITY].

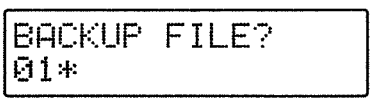
3. Press [CURSOR] to select "13 SYSTEM BACKUP to CARD?"

The Backup screen appears.



4. Press [ENTER].

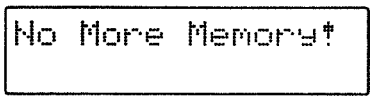
The Backup File select screen appears.



If the card does not have enough memory, the following screen appears, and the data cannot be saved.

* *After this appears, the Backup screen returns to the display.*

In such cases, insert another card that does have sufficient memory, or delete unneeded data (p. 127).



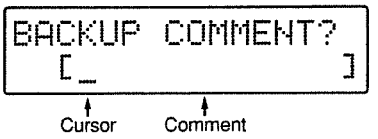
5. Turn [VALUE] to select the Backup File.

* *An asterisk ("*") appears when the selected backup file contains no data.*

6. Press [ENTER].

The Comment Input screen appears.

You can add a comment (memo) containing up to twelve characters to the selected backup file.



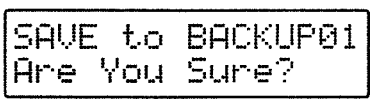
7. Use [CURSOR] and [VALUE] to enter the comments.

- If you press [SHIFT] + [◄], the cursor will move to the beginning of the comment.
- If you press [SHIFT] + [►] , the cursor will move to the end of the comment.
- If you press [INSERT] ([SHIFT] + [PART]), a space will be inserted at the cursor location.
- If you press [ERASE] ([SHIFT] + [UTILITY]), the character at the cursor location will be deleted, and subsequent characters will be moved toward the left to fill the gap.
- If you hold down [SHIFT] and turn [VALUE], uppercase / lowercase / symbols / (space) / numerals will be displayed.

8. Repeat Step 7 as needed.

9. Once you have determined the comment, press [ENTER].

The Backup File confirmation screen appears.



* *To cancel, press [EXIT].*

10. Press [ENTER].

The backup begins.

NOTE

Never turn off the power to the JS-5 or remove the memory card during a backup.

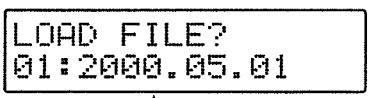
When the backup is finished, the display will indicate "Completed!"

Returning Backup Files Saved on a Card to the JS-5

This returns Backup Files saved on a memory card back to the JS-5. This function is called **Load**.

1. **Make sure that a cord is inserted in the MEMORY CARD slot.**
2. **Press [UTILITY].**
3. **Press [CURSOR] to select "14 SYSTEM LOAD from CARD?"**
   The Load screen appears.

4. **Press [ENTER].**
   The screen for selecting the Backup File appears.



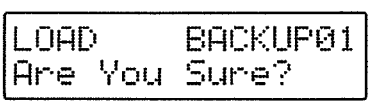
Comment

5. **Turn [VALUE] to select the file to be loaded.**

* *An asterisk ("*") appears when the selected backup file contains no data.*

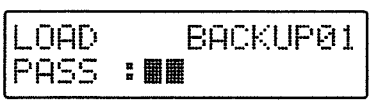
* *You cannot load backup files that contain no data. In such instances, you will be unable to proceed with subsequent operations, even when [ENTER] is pressed.*

6. **Once you have determined the file to load, press [ENTER].**
   The Load confirmation screen appears.



* *To cancel, press [EXIT].*

7. **Press [ENTER].**
   The load begins.



NOTE
Never turn off the power to the JS-5 or remove the memory card while the load is in progress.

When the Load is finished, the display will indicate "Completed!"

Deleting Data on a Card

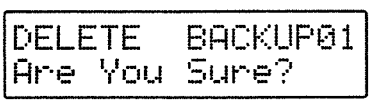
This deletes unneeded Backup Files.

1. **Press [UTILITY].**
2. **Press [CURSOR] to select "15 SYSTEM DELETE BACKUP?"**
   The Backup File delete screen appears.

3. **Press [ENTER].**

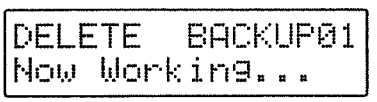
The File Delete Selection screen appears.

4. **Turn [VALUE] to select the file to be deleted.**
5. **Once you have determined the file to delete, press [ENTER].**
   The File delete confirmation screen appears.



* *To cancel, press [EXIT].*

6. **Press [ENTER] to delete the file.**
   The following screen appears, and deletion of the file is executed.



NOTE
Never turn off the power to the JS-5 or remove the memory card while a file is being deleted.

When the delete is finished, the display will indicate "Completed!"

Chapter 13 Changing the Usage Environment

Adjusting the Contrast of the Display

If the right-hand display is hard to see, adjust the contrast.

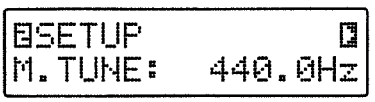
1. Press [UTILITY].
2. Press [CURSOR] to select "1 SETUP LCD CONTRAST."

3. Turn [VALUE] to adjust the contrast.
   Settings values: 1–4
4. To finish making the setting, press [UTILITY] again, or press [EXIT].

Tuning the JS-5's sound generator

This tunes the sound generator of the JS-5.

1. Press [UTILITY].
2. Press [CURSOR] and select "2 SETUP M.TUNE."



3. Turn [VALUE] to perform tuning.
   Settings values: 427.4–456.2 Hz
   The displayed value is the frequency of the A4 key.
4. To finish making the setting, press [UTILITY] again, or press [EXIT].

Changing the Metronome Settings

You can change the settings (parameters) for the metronome sound played during Realtime recording of a User Style.

1. Press [UTILITY].
2. Press [CURSOR] to select "3 SETUP METRONOME."

3. Turn [VALUE] to change the value of the setting.
   settings values: Off, LEVEL1, LEVEL2
   When you want to have the metronome sound play, set this to "LEVEL1" (for minimum volume) or "LEVEL2" (for maximum volume).
   To keep the metronome silent, set this to "OFF."
4. When you've finished making the setting, press [UTILITY] again, or press [EXIT].

Copying Groups of User Songs and Styles Between the JS-5 and Memory Cards

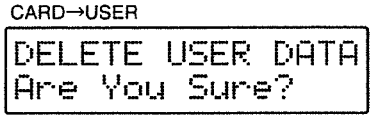
You can copy blocks of Song and Style data (backing data) from the JS-5 (User Memory) to a memory card, as well as from a memory card to the JS-5 (User Memory).

1. **Press [UTILITY].**
2. **Press [CURSOR] and select "10 ALL BACKING COPY?"**
   The Bacing Data Copy screen appears.

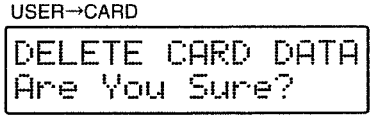
3. **Turn [VALUE] to select the copy direction.**
   USER→CARD: Copies from User Memory to the memory card.
   CARD→USER: Copies from the memory card to User Memory.
4. **Press [ENTER].**
   The display will show the conformation screen for data deletion of the destination where the data is copied.

* *Any Audio data recorded in the destination will be automatically deleted.*

CARD→USER

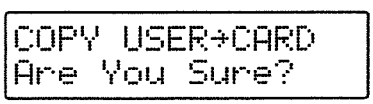


USER→CARD



* *To cancel, press [EXIT].*

5. **Press [ENTER] to execute the delete.**
   The copy confirmation screen appears.



* *To cancel, press [EXIT].*

6. **To copy the data, press [ENTER].**
   The copy is executed.
   The following screen appears while the process is carried out.

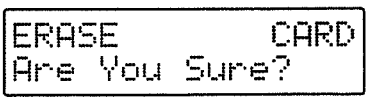
When the copy is finished, the display will indicate "Completed!"

Deleting Data in a Batch

You can perform batch deletion of sequence data saved in User Memory (on the unit) or on a memory card.

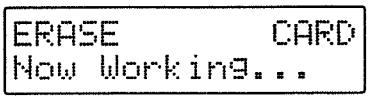
1. **Press [UTILITY].**
2. **Press [CURSOR] and select "11 ALL DATA ERASE?"**
   The Data Erase screen appears.

3. **Turn the dial to select the data you want to delete.**
   USER: This deletes erase sequence data in User Memory.
   CARD: This deletes all sequence data on a memory card.
4. **Press [ENTER].**
   A screen prompting you to confirm deletion of the data appears.



* *To cancel, press [EXIT].*

5. **To delete the data, press [ENTER].**
   The data is deleted.
   The following screen appears while the process is carried out.



When the erase is finished, the display will indicate "Completed!"

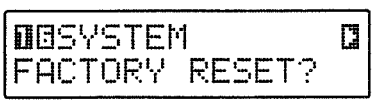
Returning to the Factory-default Settings

This returns all settings on the JS-5 to the values they had when the unit shipped from the factory. This is called **Factory Reset**.

When you perform a Factory Reset, all sequence data is erased and other settings are reset to their standard default values.

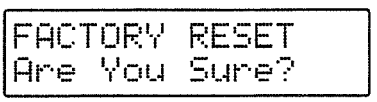
1. **Press [UTILITY].**
2. **Press [CURSOR] and select "16 SYSTEM FACTORY RESET?"**

   The Factory Reset screen appears.



3. **Press [ENTER].**

   A screen prompting you to confirm the Factory Reset operation appears.

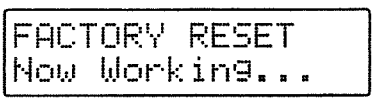


* *To cancel, press [EXIT].*

4. **To delete the data, press [ENTER].**

   The data is deleted.

   The following screen appears while the process is carried out.



When the Factory Reset is finished, the display will indicate "Completed!"

Displaying Remaining Memory

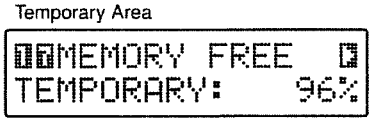
You can check the amount of available memory left in User memory, the inserted memory card, and the Temporary area.

MEMO

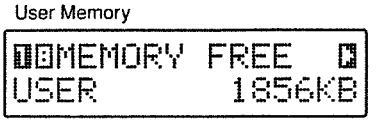
The **Temporary area** is the temporary memory that is used for calling up data saved in the User Memory and on memory cards, recording Songs and Styles, and editing data.

1. **Press [UTILITY].**
2. **Press [CURSOR] to display the desired screen.**

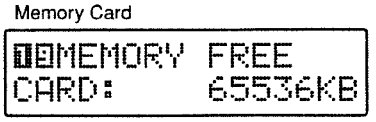
Temporary Area



User Memory



Memory Card



The remaining User and Card Memory is indicated in kilobytes; the amount of memory remaining in the Temporary Area is expressed as a percentage of the total.

* *When there is no memory card inserted, or when songs are being performed, the available memory in the memory card's Remaining Memory confirmation screen is indicated as "- - -KB."*

MEMO

A kilobyte (KB) is a unit indicating the amount of data space.

3. **To return to the original screen, press [UTILITY] again, or press [EXIT].**

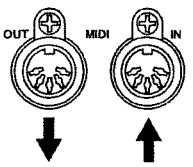
Chapter 14 Controlling the JS-5 with MIDI

What Is MIDI?

MIDI (Musical Instrument Digital Interface) is a standard that provides for the exchange of performance and other information among electronic instruments and computers. Data can be sent and received by devices equipped with MIDI connectors when such devices are connected by MIDI cables.

MIDI Connectors

The JS-5 is equipped with MIDI IN and MIDI OUT connectors.



MIDI IN

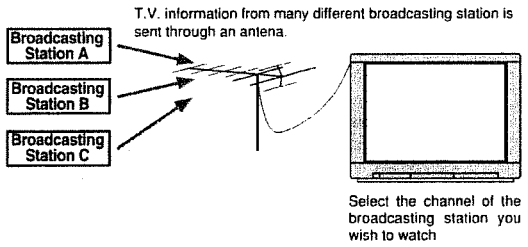
Data arriving from a connected external MIDI device is received here. It should be connected with the external MIDI device's MIDI OUT connector.

MIDI OUT

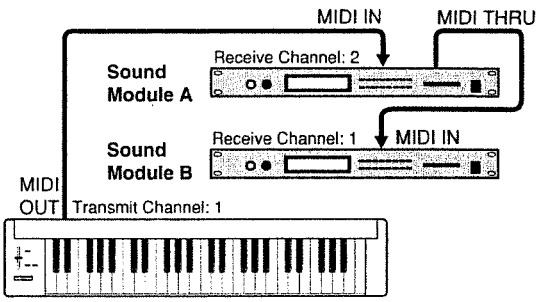
This sends out data from the JS-5. It should be connected with the MIDI IN connector of the external MIDI device.

MIDI Channels

MIDI uses channels, called MIDI channels (1 through 16), that resemble television channels. Information can be exchanged only when the sending and receiving devices are on the same channel.


T.V. information from many different broadcasting station is sent through an antena.
Broadcasting Station A
Broadcasting Station B
Broadcasting Station C
Select the channel of the broadcasting station you wish to watch

When the MIDI channels have been set as shown below, fingering the keyboard causes sound to play on sound generator B.



MIDI Channels on the JS-5

On the JS-5, channels are set for each part (Drum, Bass, Inst 1, and Inst 2).

Drum:	10
Bass:	2
Inst 1:	3
Inst 2:	4
Audio Track:	5 (Volume message only)

MIDI Information Handled by the JS-5

With MIDI, various kinds of performance-related information are transmitted, so there is accordingly a variety of different types of data (messages). MIDI information is divided into that which is handled at the channel level (Channel Messages), and that which is not related to channels (System Messages).

Information Handled by Each MIDI Channel (Channel Messages)

These are messages for transmitting information about operations during performances.

Note Messages

These correspond to the key performance data from the keyboard. The different Note Messages are shown below.

Note Number:	Key position (pitch)
Note On:	Key pressed
Note Off:	Key released
Velocity:	Velocity of keypress

Drum Part

A Note Number is assigned to each of the rhythm instruments that make up the Drum Kit. This allows each of the rhythm instruments of the Drum Kit to play different sounds as their corresponding Note Numbers are sent.

Bass/Inst 1 and 2 Parts

These are handled as is, with their pitch remaining unchanged.

* *With some instruments, sounds above C5 (Note Number 72) may not be played.*

Program Change

Drum Part

This switches the Drum Kit.

Bass/Inst 1 and 2 Parts

These switch the instrument.

Control Change

These send information for increased expressiveness in performances.

Messages Unrelated to MIDI Channels (System Messages)

System Messages include Exclusive Messages, messages necessary for synchronizing performance, messages for preventing errors, and other types of messages.

System Exclusive

These messages are used when storing data such as User Songs created with the JS-5 or settings for User Styles on another connected JS-5 or external sequencer.

Common

This category includes Song Select, which gives information concerning the selection of songs, and Song Position Pointer, used for indicating the position currently being played in a song.

Realtime

These are messages used during synchronized performances.

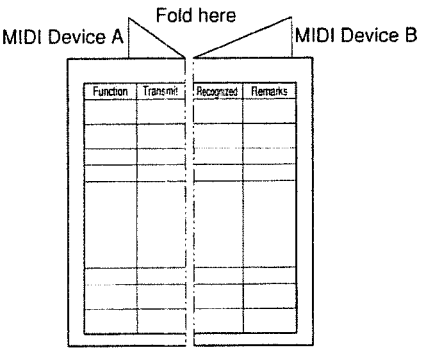
These include Clock Transmit, used for matching tempos, performance Start/Stop, and Continue Start (for restarting songs stopped while in progress).

In addition, Active Sensing Messages help prevent stuck tones when using external MIDI devices connected by MIDI cables or by other means.

About the MIDI Implementation Chart

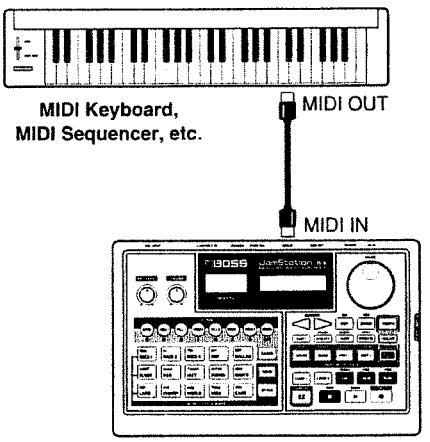
Not all MIDI Messages can be exchanged between all devices; the messages from a device must have some things in common with those of the connected device.

For this reason, owner's manuals for MIDI devices include a MIDI Implementation Chart to allow the user to quickly see which other devices are compatible. By comparing the MIDI implementation charts, the user can check to see which messages can be exchanged.



Using the JS-5 As a MIDI Sound Module

You can send performance data from an external MIDI instrument to play the data on the JS-5.



Set the sending channel on the external MIDI instrument to match the MIDI channel of the part you want to play on the JS-5.

Part	MIDI channel
Drum	10
Bass	2
Inst 1	3
Inst 2	4

Changing Tones

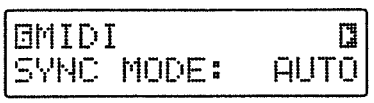
This makes the received Part instrument (or, for the Drum Part, the Drum Kit) change according to the Program Change sent from an external MIDI instrument.

Synchronizing a Performance

You can play the JS-5 in synch with an external MIDI instrument, such as a MIDI sequencer.

To synchronize a performance with an external MIDI device, it is necessary to decide whether the JS-5 or the external MIDI instrument will control starting and stopping, and which tempo, the JS-5's or that of the external MIDI device, should be followed (Sync mode).

1. **Press [UTILITY].**
2. **Press [CURSOR] and select "6 MIDI SYNC MODE."**
   The Sync Mode Setting screen appears.



3. **Turn [VALUE] to make the setting for Sync mode.**

INT:

Start/Stop..... Controlled only by the JS-5

Tempo ..... Synchronizing to the Tempo of the JS-5

MIDI:

Start/Stop ..... Start: Controlled only by the external MIDI instrument

Stop: Controllable by either the JS-5 or the external MIDI instrument

Tempo ..... Synchronized to the clock signal of the external MIDI instrument

REMOTE:

Start/Stop..... Controllable by either the JS-5 or the external MIDI instrument

Tempo ..... Synchronized to the tempo of the JS-5

AUTO:

Start/Stop..... Controllable by either the JS-5 or the external MIDI instrument

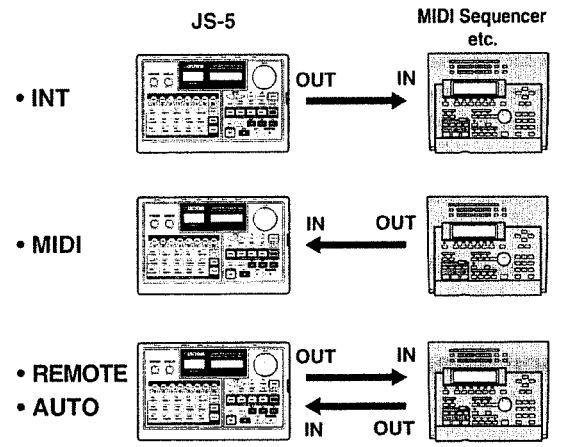
Tempo ..... Synchronized to the tempo of the JS-5 when operation is started by the JS-5, and synchronized to the clock signal of the external MIDI instrument when operation is started by the external MIDI instrument

* *If you cannot obtain an expected result in the Synchronized performance and the "AUTO" Sync mode is selected on the JS-5, change the Sync mode to "MIDI."*

* *The Sync mode setting is not memorized. The unit will be always set to "AUTO" when switched on.*

Making the Connections for Synchronized Performance

Make the connections as shown below, depending on the Sync mode.



About the Tempo Display

When the tempo is controlled by the MIDI clock signal of the external MIDI instrument (that is, when the Sync mode is "MIDI" or "AUTO"), a Tempo Display screen like the one below appears.

In this case, you can't adjust the tempo with the JS-5.

* *If MIDI clock messages from an external MIDI device are used for synchronization, the performance may drift due to inaccuracies of the MIDI clock.*

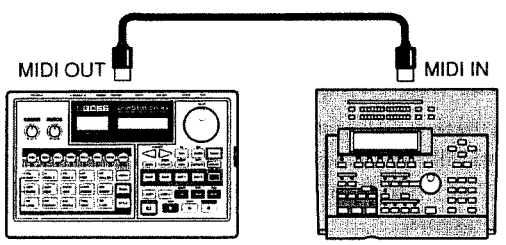
Saving Data to an External MIDI Instrument (Bulk Dump)

This sends User Songs (**excluding audio data**) and User Style data on the JS-5 unit to a MIDI sequencer or another JS-5. This is called a "bulk dump."

The data is sent as Exclusive messages. In order to send and receive Exclusive messages, the respective instruments must be set to matching **device ID numbers**.

* *For information about setting the device ID number on the external MIDI instrument, refer to the documentation for the equipment.*
* *The device ID number of the JS-5 is set to "17" when shipped from the factory.*

Connections

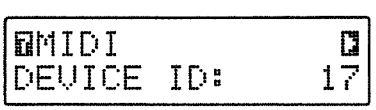


Transmit device (JS-5)

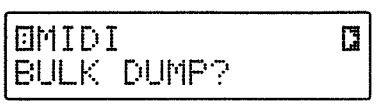
Receive device
(MIDI Sequencer etc.)

Operation

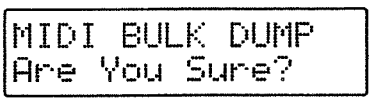
1. **Press [UTILITY].**
2. **Press [CURSOR] and select "7 MIDI DEVICE ID."**
   The Device ID Setting screen appears.



3. **Turn [VALUE] and set the device ID number.**
   Settings values: 17–32
4. **Press [CURSOR ►] and select "8 MIDI BULK DUMP?"**
   The Bulk Dump screen appears.



5. **Press [ENTER].**
   The Bulk Dump Standby screen appears.



6. **To perform a bulk dump, press [ENTER].**
   The bulk dump starts.

NOTE

Be very sure never to switch off the power while sending is in progress.

* *To cancel the operation, press [EXIT]. This returns you to the Bulk Dump screen.*

  The screen shown below appears while sending is in progress.

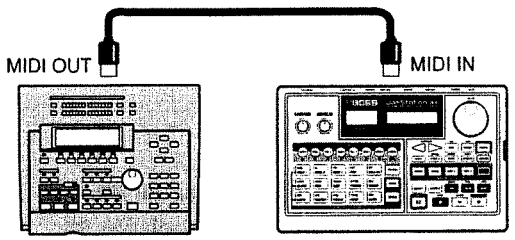
* *Pressing [EXIT] while sending is in progress quits sending and returns you to the Bulk Dump screen.*

  When the Bulk Dump is finished, the display will indicate "Completed!"

Returning Data from an External MIDI Instrument (Bulk Load)

This is used to return data sent to a MIDI sequencer to the unit, or to receive data sent from another JS-5. This is called "bulk load."

Connections



Transmit device
(MIDI Sequencer etc.)

Receive device (JS-5)

Operation

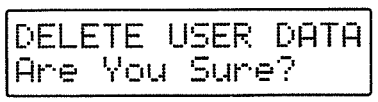
* *Set the various devices to matching device ID numbers.*

* *When returning data sent to the MIDI sequencer to the unit, make the setting for the same device ID number you used when you sent the data.*

1. Press [UTILITY].

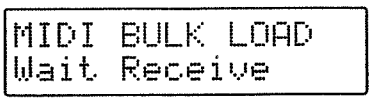
2. Press [CURSOR] and select "9 MIDI BULK LOAD?"
The Bulk Load screen appears.

3. Press [ENTER].
The delete confirmation screen for Audio data appears.

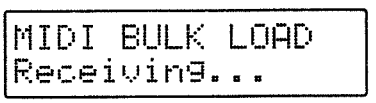


* *To cancel, press [EXIT].*

4. Press [ENTER] to execute the delete.
The Bulk Load Standby screen appears.



5. Send the data from the external MIDI instrument.
When the data is received, the data reception screen appears.



NOTE

Never switch off the power while reception is in progress!

* *Pressing [EXIT] while reception is in progress terminates reception, and you're returned to the Bulk Load screen.*

When the bulk load finishes, you are returned to the Bulk Load Standby screen.

Troubleshooting

If the JS-5 does not function as you except, please check the following pints. If this does not resolve the problem, contact a nearby Roland service center or your dealer.

No Sound

- Is the power to the JS-5 and any connected instrument turned on?
  → Check the connections and then turn on the power.
- Is the volume turned down?
  → Turn [VOLUME] to adjust the volume level (p. 18).
  → Use [REC LEVEL] to adjust the volume of the instrument (or device) connected to REC INPUT (p. 32).
- Is the part you want to play muted?
  → Press [DRUM]–[AUDIO TRACK] so that the button for the part to be sounded lights up (p. 63).
- Is the part volume set to "0?"
  → Adjust the level of each part (p. 83).
- Could the Reverb Level, Chorus Level, and Direct Level all be set to "0?"
  → Set each level to an appropriate value (p. 84).

Performance Not Starting, Even When [START] Is Pressed

- Is Sync mode set to "MIDI?"
  → Select a setting other than "MIDI" for Sync mode (p. 133).
- Has a User Song that contains no data been selected?

A specific percussion instrument does not sound

- Has that percussion instrument been muted?
  → If [DRUM]–[INST 2] is dark when you press [SHIFT], the corresponding percussion instrument sound is muted.
  If you wish to play the instrument, turn off the mute (p. 63).

Effects

Reverb Not Applied

- Could the Reverb Send Level be set to "0?"
  → Set the level to an appropriate value (p. 84).

Chorus Not Applied

- Could the Chorus Send Level be set to "0?"
  → Set the level to an appropriate value (p. 84).

Insert Effects Not Applied

- Could the Insert Effects be set at "OFF?"
  → Select the part for which the Insert Effects are to be used (p. 88).

Recording

Cannot Record

- Have you selected the Preset Song/Style?
  → Select the User Song/Style.
- Are you attempting to audio-record more than six songs?
  → When the JS-5 is used by itself, audio can be recorded for a maximum of six songs.
- Is the memory card inserted correctly?
  → Insert the card correctly (p. 125).
- Is a protect sticker affixed to the memory card?
  → In order to record on the card, remove the protect sticker (p. 125).
- Is the remaining memory insufficient?
  → Check the amount of memory remaining (p. 130).
  → Delete any unneeded User Songs (p. 81).
  → Delete any unneeded User Styles (p. 122).

Little Recording Time on Audio Track

- Are you recording at the Hi-Fi setting?
  → If the recording quality is set to Hi-Fi, the available recording time will be shorter than for LONG (p. 112).

- Have you recorded numerous short segments of audio data?
  → The recording times listed in the owner's manual are for continuous recording. The recording time will be less if numerous fragments of short audio data (several seconds) are recorded in a single song, or if numerous short songs are recorded. The recording time will also decrease if a portion of the audio data is erased when being rerecorded, or the data cannot be recorded (p. 111).

- Is there unneeded data remaining?
  → Delete unneeded audio data (p. 114).
  → If you are using a card that had been used by another device, data from that device may remain on the card. Format the card (p. 125).

- Have you saved backup files?
  → As the number of backup files increases, the available recording time will diminish (p. 126).

Sounds Recorded to the Audio Track Are Distorted

- Did you change the setting of the REC INPUT selector switch?
  → Set the REC INPUT selector switch to match the instrument (or device) connected to REC INPUT (p. 111).

- Is the recording level adjusted to an appropriate setting?
  → Before you record, adjust the recording level so that it is within the appropriate range (p. 113).

MIDI

Can't Get Sound from the JS-5 Using an External MIDI Device

- Have the MIDI channels been set correctly?
  → Set the MIDI channels so that they match the parts you want played (p. 131).

Others

Low Volume from the Instrument Connected to REC INPUT/Something is wrong with the sound quality

- Are you connecting with a high-Z instrument cable or other cable that introduces resistance?
  → Use cables (such as Roland's PCS Series cables) that do not add resistance.

- Did you change the setting of the REC INPUT selector switch?
  → Set the REC INPUT selector switch to match the instrument (or device) connected to REC INPUT (p. 111).

I muted inst 1 and inst 2, but the backing guitar sound is still heard

→ Some special guitar sounds use a drum kit instrument.

Modified settings are not saved

- Are you modifying the settings of a preset song?
  → It is not possible to save changes made to a preset song. If you wish to save the changes you make, copy the song to a user song (p. 82).

- Did you execute the Save procedure?
  → If you modified the settings of a user song, you must execute the Save procedure if you wish to keep the changes (p. 59).

The Metronome does not sound during recording of the User Style

■ Is the Drum part muted?

→ Release the mute on the Drum part (p. 63).

The key of the chord shown in the screen differs from that of the sound currently being played

■ Have you set the Key Transpose?

→ When you have set the Key Transpose (p. 60), the key of the chord actually being played will be changed according to what is set, but the key shown in the screen will remain unchanged.

The progress of the chords will be different from that of the forms

■ You might have selected the Style with a different beat.

→ If you combine a song and style with different beats, like changing a song with 4/4 beat style into a 3/4 beat style, it cannot be played properly.

Error Messages

If you attempt an incorrect operation or if an operation could not be executed, the display will indicate an error message. Refer to this list and take the appropriate action.

Battery Low!

Cause: The internal backup battery is running down.

Solution: Once you see this message, have the battery replaced with a fresh one as soon as possible to avoid the loss of all data in memory. To have the battery replaced, consult with your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" sheet.

Select User or Card

Cause: You are attempting to record a Preset Song or Style.

Solution: Press [USER] or [CARD] to select a User Song or Style.

Can't Work! Preset Song

Cause: You are attempting to erase, delete or insert the data of a Preset Song.

Solution: Data in a Preset Song cannot be erased, deleted or inserted.

Can't Work! Preset Style

Cause: You are attempting to erase or delete the data of a Preset Style.

Solution: Data in a Preset Style cannot be erased or deleted.

No Card!

Cause: [CARD] has been pressed with no memory card (SmartMedia) inserted or with the memory card inserted incompletely.

Cause: The memory card has been removed after selection of data on that memory card.

Solution: Completely and securely insert the memory card.

Unsupported Format!

Cause: The JS-5 cannot recognize or use the format of the inserted memory card.

Solution: Insert a memory card formatted for use with the JS-5 (p. 125).

Unsupported Media!

Cause: The memory card inserted is not compatible with the JS-5.

Solution: Use a memory card compatible with the JS-5 (8 to 64 MB SmartMedia with a power-source voltage of 3.3 V).

Read Error!

Cause: Memory card data cannot be loaded correctly.

Solution: Completely and securely insert the memory card.

Solution: Format the card (p. 125).

* *If the same message appears after you have taken the above steps, it is possible that the memory card is malfunctioning.*

Protected!

Cause: You are attempting to write data to a memory card to which the Write Protect sticker has been applied.

Solution: If you wish to write data to the card, peel off the Write Protect sticker (p. 125).

SONG/STYLE REC to Orig.Tempo...

Cause: The tempo selected for rerecording an Audio track differs from that used for the previous recording.

Solution: The JS-5 automatically reverts to the previous tempo (the original tempo).

Failed!

Cause: An error has occurred while copying or deleting data, or while carrying out some other operation, preventing the operation from being completed.

Solution: Try carrying out the operation once more.

Cause: The memory card is not inserted properly.

Solution: First eject the memory card, then reinsert the card firmly and securely.

No More Memory!

Cause: The amount of remaining memory on the User Memory/Memory Card/Temporary Area is not sufficient for recording or copying.

Solution: Delete unneeded data.

Solution: Use a memory card with sufficient free memory.

Too Much Data!

Cause: Recording/playback is not possible because there is too much performance data, or because the tempo is too fast.

Solution: Decrease the tempo (p. 60).

Solution: Mute a part (p. 63).

Solution: If you are using a user style, reduce the number of notes in the user style (p. 122).

Tempo Too Fast!

Cause: The playback tempo is significantly faster than the tempo used during recording, thus preventing proper playback.

Solution: Adjust the tempo.

Cause: The current operation exceeds the JS-5's internal processing capabilities, and this is preventing the audio data from playing back.

Solution: Do not make sudden changes in the tempo. Do not press STOP (RESET) or START in extremely rapid succession.

Tempo Too Slow!

Cause: The playback tempo is significantly slower than the tempo used during recording, thus preventing proper playback.

Solution: Adjust the tempo.

Cause: The current operation exceeds the JS-5's internal processing capabilities, and this is preventing the audio data from playing back.

Solution: Do not make sudden changes in the tempo. Do not press STOP (RESET) or START in extremely rapid succession.

MIDI Off Line!

Cause: There is a problem with the MIDI cable connection.

Solution: Check to make sure the cable has not been pulled out or is not shorted.

MIDI Buffer Full!

Cause: Too many MIDI messages are being received at one time for the JS-5 to process them.

Solution: Press [EXIT], then Reduce the number of MIDI messages received by the JS-5.

Checksum Error!

Cause: An exclusive message could not be correctly.

Solution: Press [EXIT], then try the operation once again.

MIDI Error!

Cause: MIDI messages could not be correctly.

Solution: Check to make sure the cable has not been pulled out or is not shorted, then try the operation once again.

Preset Song List

ROCK 1

No.	Name
001	JS-5HardRock
002	BritHardRck1
003	BritHardRck2
004	80'sHardRock
005	Fast Boogie
006	Heavy & Loud
007	Slow Rock 1
008	Slow Rock 2
009	Slow & Heavy
010	Hyper Metal
011	Old HvyMetal
012	Speed Metal
013	HvySlowShffl
014	MidFastHR 1
015	MidFastHR 2
016	80sHeavyMetl
017	ShffleHrdRck
018	FastHardRock
019	HvyFunkRock

ROCK 2

No.	Name
001	90sGrooveRck
002	90sMixedRock
003	70sClssicRck
004	70sPowerRock
005	70sFunkyRock
006	80sWestCoast
007	Cyber Rock 1
008	Cyber Rock 2
009	BritishRock1
010	BritishRock2
011	ElectricRock
012	Grunge
013	Speedy Rock
014	Funk Rock
015	Glam Rock
016	Funk Groove
017	Spacy Rock
018	Progressive

ROCK 3

No.	Name
001	AcousticRck1
002	AcousticRck2
003	Gtr Arpeggio
004	CntmpraryRck
005	8bt Rock 1
006	8bt Rock 2
007	8bt Rock 3
008	16bt Rock
009	5/4 Rock
010	Shuffle Rock
011	Fusion Rock
012	Sweet Sound
013	Synth Rock
014	Piano Rock
015	6/8 Piano
016	Trio Rock 1
017	Trio Rock 2
018	Trio Rock 3

POP

No.	Name
001	Shuffle 1
002	Shuffle 2
003	Mid Shuffle
004	Simple8btPop
005	70's Pop
006	Early80'sPop
007	Dance Pop
008	Synth Pop
009	Honky Piano
010	Slow Pop
011	Reggae Pop
012	Rockabilly
013	Surf Rock
014	8thNoteFeel1
015	8thNoteFeel2
016	16thNoteFeel

BALLAD

No.	Name
001	NewAgeBallad
002	PianoBallad1
003	PianoBallad2
004	E.PianoBalad
005	R&B Ballad
006	Rock Ballad1
007	Rock Ballad2
008	StrngsBallad
009	6/8 Ballad 1
010	6/8 Ballad 2
011	AcoGtrBallad
012	Ac.Gtr&Organ
013	MinorArpegio

BLUES

No.	Name
001	ChicagoBlues
002	BigBandBlues
003	ShuffleBlues
004	Boogie
005	Rockin'Blues
006	RckBeatBlues
007	Medium Blues
008	Funky Blues
009	Jump Blues
010	BluesInMinor
011	Blues Brass
012	AcGtr Boogie
013	Gospel Shout

R&B

No.	Name
001	RhythmGtrFnk
002	Brass Funk
003	Psyche-Funk
004	Cajun Funk
005	Funky Soul 1
006	Funky Soul 2
007	60's Soul
008	70's Soul
009	WstCoastSoul
010	Detroit Soul
011	Old R&B 1
012	Old R&B 2
013	R&B Groove 1
014	R&B Groove 2
015	R&B Shuffle
016	Smooth R&B

JAZZ

No.	Name
001	DublTimeFeel
002	Organ Jazz
003	5/4 Jazz
004	Latin Jazz
005	Soul Jazz
006	Swing Jazz 1
007	Swing Jazz 2
008	Swing 6/8
009	BigBandJazz
010	Combo Jazz
011	Modern Jazz
012	Jazz 6/8
013	Jazz Waltz
014	Jazz Ballad

FUSION

No.	Name
001	Power Fusion
002	Smooth Jazz
003	Wave Shuffle
004	Super Funk
005	Crossover
006	70's Fusion
007	80's Fusion
008	Samba Fusion
009	Pop Fusion
010	BGM Fusion
011	MellowFusion
012	Cntmp Fusion
013	Funk Fusion
014	Drum Funk

DANCE

No.	Name
001	808 Hip Hop
002	DigiRock
003	Drum'nBass
004	HipHopJazz 1
005	HipHopJazz 2
006	R&B HipHop 1
007	R&B HipHop 2
008	80's Dance
009	House
010	Techno
011	Acid Pop
012	UK Acid
013	6/8 Dance

LATIN

No.	Name
001	Latin Pop 1
002	Latin Pop 2
003	Latin Pop 3
004	Latin Pop 4
005	ElectroLatin
006	CntmpraryLtn
007	Salsa Grunge
008	Salsa 1
009	Salsa 2
010	Bossa Nova 1
011	Bossa Nova 2
012	Samba 1
013	Samba 2
014	Songo
015	Mambo
016	Cha Cha
017	Merengue
018	Cumbia
019	Bomba

COUNTRY

No.	Name
001	ShuffleCntry
002	90's Country
003	Trad Country
004	CountryPop 1
005	CountryPop 2
006	CountryPop 3
007	Cntry Ballad
008	CntryBal 3/4
009	Country Folk
010	Country Rock
011	CountryWaltz
012	Bluegrass

WORLD

No.	Name
001	Reggae 1
002	Reggae 2
003	Reggae 3
004	Reggae 4
005	ElectroRggae
006	Ska
007	Tabla Ethnic
008	Beguine
009	Ragtime
010	BandaNortena
011	Polka
012	Tango
013	Mozambique
014	Afro
015	Hawaiian

Preset Style List

ROCK 1

No.	Name	
01	JS-5HardRock	**
02	BritHardRck1	**
03	BritHardRck2	*
04	80'sHardRock	**
05	Fast Boogie	**
06	Heavy & Loud	**
07	Slow Rock 1	**
08	Slow Rock 2	**
09	Slow & Heavy	**
10	Hyper Metal	**
11	Old HvyMetal	**
12	Speed Metal	**
13	HvySlowShffl	**
14	MidFastHR 1	**
15	MidFastHR 2	*
16	80sHeavyMetl	**
17	ShffleHrdRck	**
18	FastHardRock	**
19	HvyFunkRock	*

ROCK 2

No.	Name	
01	90sGrooveRck	**
02	90sMixedRock	**
03	70sClssicRck	*
04	70sPowerRock	*
05	70sFunkyRock	*
06	80sWestCoast	**
07	Cyber Rock 1	*
08	Cyber Rock 2	**
09	BritishRock1	*
10	BritishRock2	**
11	ElectricRock	*
12	Grunge	**
13	Speedy Rock	*
14	Funk Rock	*
15	Glam Rock	*
16	Funk Groove	**
17	Spacy Rock	**
18	Progressive	**

ROCK 3

No.	Name	
01	AcousticRck1	*
02	AcousticRck2	*
03	Gtr Arpeggio	*
04	CntmpraryRck	*
05	8bt Rock 1	*
06	8bt Rock 2	*
07	8bt Rock 3	*
08	16bt Rock	*
09	5/4 Rock	**
10	Shuffle Rock	*
11	Fusion Rock	**
12	Sweet Sound	*
13	Synth Rock	*
14	Piano Rock	*
15	6/8 Piano	**
16	Trio Rock 1	**
17	Trio Rock 2	*
18	Trio Rock 3	*

POP

No.	Name	
01	Shuffle 1	*
02	Shuffle 2	*
03	Mid Shuffle	*
04	Simple8btPop	*
05	70's Pop	**
06	Early80'sPop	**
07	Dance Pop	**
08	Synth Pop	**
09	Honky Piano	*
10	Slow Pop	*
11	Reggae Pop	**
12	Rockabilly	*
13	Surf Rock	**
14	8thNoteFeel1	*
15	8thNoteFeel2	*
16	16thNoteFeel	*

BALLAD

No.	Name	
01	NewAgeBallad	*
02	PianoBallad1	*
03	PianoBallad2	*
04	E.PianoBalad	*
05	R&B Ballad	**
06	Rock Ballad1	**
07	Rock Ballad2	*
08	StrngsBallad	*
09	6/8 Ballad 1	*
10	6/8 Ballad 2	*
11	AcoGtrBallad	**
12	Ac.Gtr&Organ	*
13	MinorArpegio	**

BLUES

No.	Name	
01	ChicagoBlues	*
02	OrganBlues	**
03	ShuffleBlues	*
04	Boogie	*
05	Rockin'Blues	*
06	RckBeatBlues	*
07	Medium Blues	*
08	Funky Blues	*
09	Jump Blues	*
10	BluesInMinor	**
11	Blues Brass	*
12	AcGtr Boogie	*
13	Gospel Shout	*

R&B

No.	Name	
01	RhythmGtrFnk	*
02	Brass Funk	**
03	Psyche-Funk	*
04	Cajun Funk	*
05	Funky Soul 1	*
06	Funky Soul 2	*
07	60's Soul	**
08	70's Soul	*
09	WstCoastSoul	*
10	Detroit Soul	*
11	Old R&B 1	*
12	Old R&B 2	*
13	R&B Groove 1	*
14	R&B Groove 2	*
15	R&B Shuffle	*
16	Smooth R&B	*

JAZZ

No.	Name	
01	DublTimeFeel	**
02	Organ Jazz	*
03	5/4 Jazz	*
04	Latin Jazz	*
05	Soul Jazz	**
06	Swing Jazz 1	*
07	Swing Jazz 2	*
08	Swing 6/8	*
09	BigBandJazz	*
10	Combo Jazz	*
11	Modern Jazz	*
12	Jazz 6/8	**
13	Jazz Waltz	*
14	Jazz Ballad	*

FUSION

No.	Name	
01	Power Fusion	**
02	Smooth Jazz	*
03	Wave Shuffle	*
04	Super Funk	*
05	Crossover	*
06	70's Fusion	*
07	80's Fusion	**
08	Samba Fusion	*
09	Pop Fusion	**
10	BGM Fusion	**
11	MellowFusion	*
12	Cntmp Fusion	*
13	Funk Fusion	**
14	Drum Funk	*

DANCE

No.	Name	
01	808 Hip Hop	**
02	DigiRock	*
03	Drum'nBass	*
04	HipHopJazz 1	**
05	HipHopJazz 2	*
06	R&B HipHop 1	**
07	R&B HipHop 2	**
08	80's Dance	**
09	House	**
10	Techno	*
11	Acid Pop	**
12	UK Acid	**
13	6/8 Dance	**

LATIN

No.	Name	
01	Latin Pop 1	*
02	Latin Pop 2	*
03	Latin Pop 3	**
04	Latin Pop 4	*
05	ElectroLatin	*
06	CntmpraryLtn	*
07	Salsa Grunge	*
08	Salsa 1	*
09	Salsa 2	**
10	Bossa Nova 1	*
11	Bossa Nova 2	*
12	Samba 1	*
13	Samba 2	*
14	Songo	*
15	Mambo	*
16	Cha Cha	*
17	Merengue	*
18	Cumbia	*
19	Bomba	*

COUNTRY

No.	Name	
01	ShuffleCntry	*
02	90's Country	*
03	Trad Country	*
04	CountryPop 1	*
05	CountryPop 2	*
06	CountryPop 3	*
07	Cntry Ballad	*
08	CntryBal 3/4	*
09	Country Folk	*
10	Country Rock	*
11	CountryWaltz	*
12	Bluegrass	*

WORLD

No.	Name	
01	Reggae 1	*
02	Reggae 2	*
03	Reggae 3	**
04	Reggae 4	*
05	ElectroRggae	*
06	Ska	*
07	Tabla Ethnic	**
08	Beguine	*
09	Ragtime	*
10	BandaNortena	*
11	Polka	**
12	Tango	**
13	Mozambique	*
14	Afro	*
15	Hawaiian	*

* : This Style is ideal for major melody.

** : This Style is ideal for mimor melody.

Instrument List

No.	Name	
001	Fingered Bs1	
002	Fingered Bs2	
003	Fingered Bs3	
004	Fingered Bs4	
005	MonoFingerBs	*
006	Pick Bass 1	
007	Pick Bass 2	
008	MonoPickBass	*
009	Hip Bass	
010	PickBs forOD	
011	Slap Bass 1	
012	Slap Bass 2	
013	Slap Bass 3	
014	MonoSlapBass	*
015	Finger&Slap	
016	Acoustic Bs1	
017	Acoustic Bs2	
018	Acoustic Bs3	
019	Acoustic Bs4	
020	Fretless Bs1	
021	Fretless Bs2	
022	MonoFretless	*
023	TwinFretless	
024	Muted Bass 1	
025	Muted Bass 2	
026	Funk Bass	
027	Fuzz Bass	
028	Saw Bass	*
029	Acid Bass	
030	SH101 Bass	*
031	House Bass	*
032	Rubber Bass	*
033	Dist Gtr 1	
034	Dist Gtr 2	
035	MutedDistGtr	
036	Power Guitar	
037	Mute&PowerGt	
038	Nylon Gtr 1	
039	Nylon Gtr 2	
040	NylonStrings	
041	Wide Steel	
042	6-Str Steel	
043	12-Str Steel	
044	JC Strat	
045	Rhythm Gtr	
046	Jazz Gtr 1	
047	Jazz Gtr 2	
048	MutedGuitar1	
049	MutedGuitar2	
050	Tremolo Gtr	

No.	Name
051	Clean Front
052	Clean Rear
053	Gtr For FX 1
054	Gtr For FX 2
055	Gtr For FX 3
056	Gtr For FX 4
057	Banjo
058	Sitar
059	Pedal Steel
060	Piano 1
061	Piano 2
062	Piano 3
063	Honky-tonk
064	MIDI Piano
065	Bright EP
066	Rhodes EP
067	BrightRhodes
068	Mr.Suitcase
069	FM EP
070	Digi Rhodes
071	MK-80 Rhodes
072	Clav 1
073	Clav 2
074	Funk Clav
075	Rock Organ
076	Tone Wh.Solo
077	Dist Organ 1
078	Dist Organ 2
079	Rotary Organ
080	Jazz Organ 1
081	Jazz Organ 2
082	Ballad Organ
083	Gospel Organ
084	Perc Organ
085	Small Church
086	Cathedral
087	Vibraphone
088	Marimba
089	Steel Drums
090	Accordion Fr
091	Clarinet
092	Flute
093	Pan Flute
094	Trumpet
095	MutedTrumpet
096	Trombone
097	Harmonica
098	Alto Sax
099	Tenor Sax
100	Baritone Sax

No.	Name	
101	Tp&Tb&Sax.	
102	Brass Sect.	
103	Octave Brass	
104	Bari/BrsSect	
105	Synth Brass1	
106	Synth Brass2	
107	Poly Synth	
108	Unison Saws	
109	Violin	
110	Viola	
111	Cello	
112	Contrabass	
113	PizzicatoStr	
114	Wide Strings	
115	Syn Strings1	
116	Syn Strings2	
117	Str.Ensmble	
118	Warm Pad	
119	Hollow Pad	
120	Wire String	
121	SynVox Key	
122	Bell Heaven	
123	Saw Lead	*
124	Pulse Lead	*
125	Square Lead	
126	Sine Wave	*
127	Velo Tekno	*
128	Analog Seq	

* : Monophonic

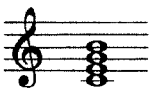
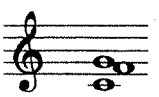
Drum Kit List

Note No.	001 PowerKit1	002 FunkKit1	003 RockKit1	004 DanceKit1	005 BrushKit	006 JazzKit	007 PopKit1	008 ElectroKit
35	Verb Kick	Old Kick	Round Kick	Dance Kick 3	Hybrid Kick1	Round Kick	Round Kick	Mondo Kick
C2 36	Deep Kick 3	Sol Kick	Verb Kick	Dance Kick 2	Old Kick	Old Kick	Hybrid Kick1	Elec Kick
37	Dry Stick	Dry Stick	Dry Stick	Side Stick	Side Stick	Dry Stick	Dry Stick	Dry Stick
38	Piccolo SN	RoomSnr	Sol Snare	Jungle SD1	Brush Swish	Loose Snr	Ballad SN	Ele Snare
39	Hand Claps	Hand Claps	808clps2	808clps2	Brush Slap	Hand Claps	Hand Claps	808clps2
40	RoomSnr	Natural SN2	Hard Snare	HipHop SD2	Brush Roll	Ballad SN	Natural SN2	Piccolo SN
41	Verb Tom Lo	Dry Tom Lo	Verb Tom Lo	909 Tom 2	BrushTomMid	Verb Tom Lo	Verb Tom Lo	SYN_DRUM
42	Cl HiHat 2	Cl HiHat 2	Cl HiHat 2	606 HiHat Cl	Pedal HiHat	Cl HiHat 2	Cl HiHat 2	Cl HiHat 2
43	Verb Tom Lo	Dry Tom Lo	Verb Tom Lo	909 Tom 2	BrushTomMid	Dry Tom Lo	Verb Tom Lo	SYN_DRUM
44	Pedal HiHat	Pedal HiHat	Pedal HiHat	606 HiHat Cl	Pedal HiHat	Pedal HiHat	Pedal HiHat	Pedal HiHat
45	Verb Tom Lo	Dry Tom Lo	Verb Tom Lo	909 Tom 2	BrushTomMid	Verb Tom Lo	Verb Tom Lo	SYN_DRUM
46	Op HiHat	Op HiHat	Op HiHat	606 HiHat Op	Op HiHat	Op HiHat	Op HiHat	Op HiHat
47	Verb Tom Lo	Dry Tom Lo	Verb Tom Lo	909 Tom 2	BrushTomHi	Dry Tom Lo	Verb Tom Lo	SYN_DRUM
C3 48	Verb Tom Hi	Dry Tom Hi	Verb Tom Hi	909 Tom 2	BrushTomHi	Verb Tom Hi	Verb Tom Hi	SYN_DRUM
49	Crash 1	Crash 1	Crash 1	Crash 1	Crash 1	Crash 1	Crash 1	Crash 1
50	Verb Tom Hi	Dry Tom Hi	Verb Tom Hi	909 Tom 2	BrushTomHi	Dry Tom Hi	Verb Tom Hi	SYN_DRUM
51	Ride 1	Ride 1	Ride 1	Ride 2	Ride 1	Ride 1	Ride 2	Ride 2
52	China Cym	China Cym	China Cym	China Cym	China Cym	China Cym	China Cym	China Cym
53	Ride Bell 1	Ride Bell 1	Ride Bell 1	Ride Bell 1	Ride Bell 1	Ride Bell 1	Ride Bell 1	Ride Bell 1
54	Tambourine	Tambourine	Tambourine	Tambourine	Tambourine	Tambourine	Tambourine	Tambourine
55	Splash	Splash	Splash	606 HiHat Op	Splash	Splash	Splash	606 HiHat Op
56	Cowbell 1	Cowbell 1	Cowbell 1	Cowbell 1	Cowbell 1	Cowbell 1	Cowbell 1	Cowbell 1
57	Crash 1	Crash 1	Crash 1	Crash 1	Crash 1	Crash 1	Crash 1	Crash 1
58	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap
59	Ride 2	Ride 2	Ride 2	Ride 1	Ride 2	Ride 2	Ride 2	Ride 1
C4 60	Cga Mute Hi	Cga Mute Hi	Cga Mute Hi	Cga Mute Hi	Cga Mute Hi	Cga Mute Hi	Cga Mute Hi	Cga Mute Hi
61	Cga Mute Lo	Cga Mute Lo	Cga Mute Lo	Cga Mute Lo	Cga Mute Lo	Cga Mute Lo	Cga Mute Lo	Cga Mute Lo
62	Cga Slap	Cga Slap	Cga Slap	Cga Slap	Cga Slap	Cga Slap	Cga Slap	Cga Slap
63	Cga Open Hi	Cga Open Hi	Cga Open Hi	Cga Open Hi	Cga Open Hi	Cga Open Hi	Cga Open Hi	Cga Open Hi
64	Cga Open Lo	Cga Open Lo	Cga Open Lo	Cga Open Lo	Cga Open Lo	Cga Open Lo	Cga Open Lo	Cga Open Lo
65	Timbales H	Timbales H	Timbales H	Timbales H	Timbales H	Timbales H	Timbales H	Timbales H
66	Timbales L	Timbales L	Timbales L	Timbales L	Timbales L	Timbales L	Timbales L	Timbales L
67	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo
68	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo
69	Cabasa Up	Cabasa Up	Cabasa Up	Cabasa Up	Cabasa Up	Cabasa Up	Cabasa Up	Cabasa Up
70	Maracas	Maracas	Maracas	Maracas	Maracas	Maracas	Maracas	Maracas
71	SambaWhistle	SambaWhistle	SambaWhistle	Soft Pad A	SambaWhistle	SambaWhistle	SambaWhistle	SambaWhistle
C5 72	SambaWhistle	SambaWhistle	SambaWhistle	Soft Pad B	SambaWhistle	SambaWhistle	SambaWhistle	SambaWhistle
73	Long Guiro	Long Guiro	Long Guiro	Long Guiro	Long Guiro	Long Guiro	Long Guiro	Long Guiro
74	Long Guiro	Long Guiro	Long Guiro	Long Guiro	Long Guiro	Long Guiro	Long Guiro	Long Guiro
75	Claves	Claves	Claves	Claves	Claves	Claves	Claves	Claves
76	Wood Block	Wood Block	Wood Block	Wood Block	Wood Block	Wood Block	Wood Block	Wood Block
77	Wood Block	Wood Block	Wood Block	Wood Block	Wood Block	Wood Block	Wood Block	Wood Block
78	Cuica	Cuica	Cuica	Cuica	Cuica	Cuica	Cuica	Cuica
79	Cuica	Cuica	Cuica	Cuica	Cuica	Cuica	Cuica	Cuica
80	Open Triangl	Open Triangl	Open Triangl	Open Triangl	Open Triangl	Open Triangl	Open Triangl	Open Triangl
81	Open Triangl	Open Triangl	Open Triangl	Open Triangl	Open Triangl	Open Triangl	Open Triangl	Open Triangl
82	Cabasa Cut	Cabasa Cut	Cabasa Cut	Cabasa Cut	Cabasa Cut	Cabasa Cut	Cabasa Cut	Cabasa Cut
83	Bongo Hi	Bongo Hi	Bongo Hi	Bongo Hi	Bongo Hi	Bongo Hi	Bongo Hi	Bongo Hi
C6 84	Bongo Lo	Bongo Lo	Bongo Lo	Bongo Lo	Bongo Lo	Bongo Lo	Bongo Lo	Bongo Lo
85	Wood Block	Wood Block	Wood Block	Wood Block	Wood Block	Wood Block	Wood Block	Wood Block
86	Cga Slap	Cga Slap	Cga Slap	White Noise	Cga Slap	Cga Slap	Cga Slap	White Noise
87	Dry Tom Lo	Dry Tom Lo	Dry Tom Lo	White Noise	Dry Tom Lo	Dry Tom Lo	Dry Tom Lo	White Noise
88	Mondo Kick	Round Kick	Lite Kick	Elec Kick	Lite Kick	Lite Kick	Dance Kick 3	Round Kick
89	Round Kick	Old Kick	Round Kick	909 Kick	Round Kick	Round Kick	909 Snare	Natural SN2
90	Hybrid Kick1	Sol Snare	Old Kick	Old Kick	Old Kick	Old Kick	606 HiHat Cl	China Cym
91	808 Kick	Natural SN1	808 Kick	808 Kick	808 Kick	808 Kick	Tabla Tun	Splash
92	Natural SN1	Wah Up 1	Natural SN1	808 SN	Natural SN1	Natural SN1	Tabla Ge	SLAP
93	Natural SN2	Wah Down 1	Natural SN2	909 Snare	Natural SN2	Natural SN2	Tabla Na	MG Blip
94	Hard Snare	Wah Down 2	SN Roll	Rap Snr	SN Roll	SN Roll	Tabla Te	Scratch 1
95	Op HiHat	Wah Up 2	Brush Slap	Natural SN2	Brush Slap	Brush Slap	Tabla Tkt	Scratch 2
C7 96	Metronome 2	Metronome 2	Metronome 2	MC500 Beep 2	Metronome 2	Metronome 2	Metronome 2	MC500 Beep 2
97	R8 Click	R8 Click	R8 Click	R8 Click	R8 Click	R8 Click	R8 Click	R8 Click
98	Metronome 1	Metronome 1	Metronome 1	MC500 Beep 1	Metronome 1	Metronome 1	Metronome 1	MC500 Beep 1

Note No.	009 CountryKit	010 OrchestraKit	011 PowerKit2	012 DanceKit2	013 PopKit2	014 FunkKit2	015 DanceKit3	016 RockKit2
35	Lite Kick	Old Kick	Deep Kick 3	Kick Ghost	Dance Kick 3	Hybrid Kick1	909 Kick	Deep Kick 3
C2 36	Old Kick	Old Kick	Mondo Kick	808 Kick	Round Kick	Sol Kick	808 Kick	Hybrid Kick1
37	Dry Stick	Dry Stick	Dry Stick	909 Rim 2	Dry Stick	Dry Stick	909 Rim 2	Dry Stick
38	Ballad SN	Loose Snr	Rash Snare	ungle SD2	Hard Snare	RoomSnr	808 SN	Natural SN1
39	Hand Claps	Hand Claps	Hand Claps	808clps2	Hand Claps	Hand Claps	808clps2	Hand Claps
40	Brush Slap	SN Roll	Hard Snare	ungle SD1	909 Snare	Wet Snare	909 Snare	Piccolo SN
41	Dry Tom Lo	Timpani	Verb Tom Lo	909 Tom 2	Tom Lo	Dry Tom Lo	808 Kick	Tom Lo
42	Cl HiHat 2	Timpani	Cl HiHat 2	606 HiHat Cl	Cl HiHat 2	Cl HiHat 2	606 HiHat Cl	Cl HiHat 2
43	Dry Tom Lo	Timpani	Verb Tom Lo	909 Tom 2	Tom Lo	Dry Tom Lo	909 Tom 2	Tom Lo
44	Pedal HiHat	Timpani	Pedal HiHat	ungle HiHat	Pedal HiHat	Pedal HiHat	606 HiHat Cl	Pedal HiHat
45	Dry Tom Lo	Timpani	Verb Tom Lo	909 Tom 2	Tom Lo	Dry Tom Lo	808 Kick	Tom Lo
46	Op HiHat	Timpani	Op HiHat	606 HiHat Op	Op HiHat	Op HiHat	606 HiHat Op	Op HiHat
47	Dry Tom Lo	Timpani	Verb Tom Lo	909 Tom 2	Tom Lo	Dry Tom Lo	909 Tom 2	Tom Lo
C3 48	Dry Tom Hi	Timpani	Verb Tom Hi	909 Tom 2	Tom Mid	Dry Tom Hi	808 Kick	Tom Mid
49	Crash 1	Timpani	Crash 1	Crash 1	Crash 1	Crash 1	909 Tom 2	Crash 1
50	Dry Tom Hi	Timpani	Verb Tom Hi	909 Tom 2	Tom Mid	Dry Tom Hi	909 Tom 2	Tom Mid
51	Ride 1	Timpani	Ride 1	Ride 2	Ride 2	Ride 1	Ride 2	Ride 2
52	China Cym	Timpani	China Cym	China Cym	China Cym	China Cym	China Cym	China Cym
53	Ride Bell 1	Timpani	Ride Bell 1	Ride Bell 1	Ride Bell 1	Ride Bell 1	Ride Bell 1	Ride Bell 1
54	Tambourine	Tambourine	Tambourine	Tambourine	Tambourine	Tambourine	Tambourine	Tambourine
55	Splash	Splash	Splash	606 HiHat Op	Splash	Splash	606 HiHat Op	Splash
56	Cowbell 1	Cowbell 1	Cowbell 1	Cowbell 1	Cowbell 1	Cowbell 1	Cowbell 1	Cowbell 1
57	Crash 1	Crash 1	Crash 1	Crash 1	Crash 1	Crash 1	Crash 1	Crash 1
58	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap
59	Ride 2	Ride 2	Ride 2	Ride 1	Ride 1	Ride 2	Ride 1	Ride 1
C4 60	Cga Mute Hi	Cga Mute Hi	Cga Mute Hi	Cga Mute Hi	Cga Mute Hi	Cga Mute Hi	Cga Mute Hi	Cga Mute Hi
61	Cga Mute Lo	Cga Mute Lo	Cga Mute Lo	Cga Mute Lo	Cga Mute Lo	Cga Mute Lo	Cga Mute Lo	Cga Mute Lo
62	Cga Slap	Cga Slap	Cga Slap	Cga Slap	Cga Slap	Cga Slap	Cga Slap	Cga Slap
63	Cga Open Hi	Cga Open Hi	Cga Open Hi	Cga Open Hi	Cga Open Hi	Cga Open Hi	Cga Open Hi	Cga Open Hi
64	Cga Open Lo	Cga Open Lo	Cga Open Lo	Cga Open Lo	Cga Open Lo	Cga Open Lo	Cga Open Lo	Cga Open Lo
65	Timbales H	Timbales H	Timbales H	Timbales H	Timbales H	Timbales H	Timbales H	Timbales H
66	Timbales L	Timbales L	Timbales L	Timbales L	Timbales L	Timbales L	Timbales L	Timbales L
67	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	HI_Q	Agogo
68	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	MG Blip	Agogo
69	Cabasa Up	Cabasa Up	Cabasa Up	Cabasa Up	Cabasa Up	Cabasa Up	Cabasa Up	Cabasa Up
70	Maracas	Maracas	Maracas	Maracas	Maracas	Maracas	Maracas	Maracas
71	SambaWhistle	SambaWhistle	SambaWhistle	Soft Pad A	SambaWhistle	SambaWhistle	Soft Pad A	SambaWhistle
C5 72	SambaWhistle	SambaWhistle	SambaWhistle	Soft Pad B	SambaWhistle	SambaWhistle	Soft Pad B	SambaWhistle
73	Long Guiro	Long Guiro	Long Guiro	Long Guiro	Long Guiro	Long Guiro	Long Guiro	Long Guiro
74	Long Guiro	Long Guiro	Long Guiro	Long Guiro	Long Guiro	Long Guiro	Long Guiro	Long Guiro
75	Claves	Claves	Claves	Claves	Claves	Claves	Claves	Claves
76	Wood Block	Wood Block	Wood Block	Wood Block	Wood Block	Wood Block	Wood Block	Wood Block
77	Wood Block	Wood Block	Wood Block	Wood Block	Wood Block	Wood Block	Wood Block	Wood Block
78	Cuica	Cuica	Cuica	Cuica	Cuica	Cuica	Cuica	Cuica
79	Cuica	Cuica	Cuica	Cuica	Cuica	Cuica	Cuica	Cuica
80	Open Triangl	Open Triangl	Open Triangl	Open Triangl	Open Triangl	Open Triangl	Open Triangl	Open Triangl
81	Open Triangl	Open Triangl	Open Triangl	Open Triangl	Open Triangl	Open Triangl	Open Triangl	Open Triangl
82	Cabasa Cut	Cabasa Cut	Cabasa Cut	Cabasa Cut	Cabasa Cut	Cabasa Cut	Cabasa Cut	Cabasa Cut
83	Bongo Hi	Bongo Hi	Bongo Hi	Bongo Hi	Bongo Hi	Bongo Hi	Bongo Hi	Bongo Hi
C6 84	Bongo Lo	Bongo Lo	Bongo Lo	Bongo Lo	Bongo Lo	Bongo Lo	Bongo Lo	Bongo Lo
85	Wood Block	Wood Block	Wood Block	Wood Block	Wood Block	Wood Block	Wood Block	Wood Block
86	Cga Slap	Cga Slap	Cga Slap	White Noise	Cga Slap	Cga Slap	White Noise	Cga Slap
87	Dry Tom Lo	Dry Tom Lo	Dry Tom Lo	White Noise	Dry Tom Lo	Dry Tom Lo	White Noise	Dry Tom Lo
88	Hybrid Kick1	Hybrid Kick1	Verb Kick	Techno BD2	Hybrid Kick1	Round Kick	Elec Kick	Lite Kick
89	Round Kick	Ballad SN	Round Kick	909 Kick	ungle SD1	Old Kick	Dance Kick 2	Round Kick
90	909 Kick	Cl HiHat 2	Hybrid Kick1	Elec Kick	606 HiHat Cl	RoomSnr	Old Kick	Old Kick
91	808 Kick	Crash 1	808 Kick	Dance Kick 3	Tabla Tun	Natural SN2	Hybrid Kick1	808 Kick
92	Natural SN1	Pedal HiHat	Natural SN1	808 SN	Tabla Ge	Wah Up 1	Jungle SD2	Natural SN1
93	Natural SN2	Ride 1	Natural SN2	909 Snare	Tabla Na	Wah Down 1	90's Snare	Natural SN2
94	SN Roll	Op HiHat	Hard Snare	Scratch 1	Tabla Te	Wah Down 2	SLAP	SN Roll
95	808 SN	Ride Bell 1	HipHop SD2	Scratch 2	Tabla Tkt	Wah Up 2	REV Dance K3	Op HiHat
C7 96	Metronome 2	Metronome 2	Metronome 2	MC500 Beep 2	Metronome 2	Metronome 2	MC500 Beep 2	Metronome 2
97	R8 Click	R8 Click	R8 Click	HI_Q	R8 Click	R8 Click	R8 Click	R8 Click
98	Metronome 1	Metronome 1	Metronome 1	MC500 Beep 1	Metronome 1	Metronome 1	MC500 Beep 1	Metronome 1

Chord Type Chart

Chord types that enable chord conversion (26 types and N.C.) consist of the following notes. The following shows chord types with the root C.

– –	(N.C)	6		mM7	
Maj		69		m7	
M7		m6		m7♭5	
M9		m69		m9	
7		9		dim	
7♭5		add9		sus4	
7(13)		madd9		7sus4	
7♭9		mM9		aug	
7♯9		m		aug7	

JamStation
Model: JS-5

MIDI Implemantation

Date: Apr. 5, 2000
Version: 1.00

1. TRANSMITTED DATA

■ Channel Voice Message

* ch. 2: BASS part, ch. 3:INST 1 part, ch. 4: INST 2 part, ch. 10: DRUM part

● Note Off

Status	2nd byte	3rd byte
9nH	kkH	00H

n=MIDI channel : 1H-3H, 9H (ch. 2, 3, 4, 10)
kk=Note number : 00H-7FH (0-127)

* If PART MUTE is ON, the device does't transmit.

● Note on

Status	2nd byte	3rd byte
9nH	kkH	vvH

n=MIDI channel : 1H-3H, 9H (ch. 2, 3, 4, 10)
kk=Note number: 00H-7FH (0-127)
vv=Velocity : 01H-7FH (1-127)

* If PART MUTE is ON, the device does't transmit.

■ System Exclusive Message

Status	Data byte	Status
F0H	iiH, ddH, ..., eeH	F7H

F0H : System Exclusive
ii=ID Number : 41=Roland
7E=Universal Non-Realtime Message
7F=Universal Realtime Message
dd, ..., ee=Data : 00H-7FH (0-127)
F7H : EOX (End Of Exclusive)

* With the JS-5, the System Exclusive Messages can be used to transmit Bulk Dump of Song/Pattern data and system data. For details refer to p. 134.

■ System Common Message

If the Sync mode is set at "MIDI", this message is never transmitted.

● Song Position Pointer

Status	2nd byte	3rd byte
F2H	llH	mmH

mm, ll =Value : 00H, 00H-7F, 7FH (0-16383)

* Transmitted when a measure is changed in STOP state.

● Song Select

Status	2nd byte
F3H	ssH

ss=Song number : 00H-12H (0-18)

* The Song Select will be transmitted if the song is changed.

■ System Realtime Message

If the Sync mode is set at "MIDI", this message is never transmitted.
The Timing clock is transmitted even if no songs are played.

● Timing Clock

Status
F8H

● Start

Status
FAH

● Continue

Status
FBH

● Stop

Status
FCH

● Active Sensing

Status
FEH

* Transmitted for checking MIDI connections between the JS-5 and external device.

2. RECOGNIZED DATA

■ Channel Voice Message

● Note Off

Status	2nd byte	3rd byte
8nH	kkH	vvH
9nH	kkH	00H

n=MIDI channel : 1H-3H, 9H (ch. 2, 3, 4, 10)
kk=Note number : 00H-7FH (0-127)
vv=Velocity : 00H-7FH (0-127)

The Velocity is always ignored.
This message received on the channel of Drum Part is Ignored.

● Note on

Status	2nd byte	3rd byte
9nH	kkH	vvH

n=MIDI channel : 1H-3H, 9H (ch. 2, 3, 4, 10)
kk=Note number : 00H-7FH (0-127)
vv=Velocity : 01H-7FH (1-127)

● Control Change

○ Modulation

Status	2nd byte	3rd byte
BnH	01H	vvH

n=MIDI channel : 1H-3H, 9H (ch. 2, 3, 4, 10)
vv=Modulation depth : 00H-7FH (0-127)

○ DATA Entry MSB

Status	2nd byte	3rd byte
BnH	06H	vvH

n=MIDI channel : 1H-3H, 9H (ch. 2, 3, 4, 10)
vv=MSB Value for RPN: 00H-7FH (0-127)

○ DATA Entry LSB

Status	2nd byte	3rd byte
BnH	26H	vvH

n=MIDI channel : 1H-3H, 9H (ch. 2, 3, 4, 10)
vv=LSB Value for RPN: 00H-7FH (0-127)

○Volume

Status	2nd byte	3rd byte
BnH	07H	vvH

n=MIDI channel : 1H-3H, 9H (ch. 2, 3, 4, 10)
vv=Volume : 00H-7FH (0-127)

○ Pan

Status	2nd byte	3rd byte
BnH	0AH	vvH

n=MIDI channel : 1H-3H, 9H (ch. 2, 3, 4, 10)
vv=Pan : 00H-7FH (0-127)

○ Expression

Status	2nd byte	3rd byte
BnH	0BH	vvH

n=MIDI channel : 1H-3H, 9H (ch. 2, 3, 4, 10)
vv=Expression : 00H-7FH (0-127)

○ Hold 1

Status	2nd byte	3rd byte
BnH	040H	vvH

n=MIDI channel : 1H-3H, 9H (ch. 2, 3, 4, 10)
vv=Control value : 00H-7FH (0-127) 0-63=OFF 64-127=ON

○ Effect1 (Reverb Level / Delay Feedback)

Status	2nd byte	3rd byte
BnH	5BH	vvH

n=MIDI channel : 1H-3H, 9H (ch. 2, 3, 4, 10)
vv=Control value : 00H-7FH (0-127)

- This message determines the level of Reverb when the selected Effect is Reverb, or delay level when the selected effect is Delay.
- For some instruments within the drum kit, the reverb/delay effect may not apply.

○ Effect3 (Chorus Level)

Status	2nd byte	3rd byte
BnH	5DH	vvH

n=MIDI channel : 1H-3H, 9H (ch. 2, 3, 4, 10)
vv=Control value : 00H-7FH (0-127)

- Flanger effect is not obtained if the Flanger send level of each instrument in the Drum kit is not set at high.
- For some instruments within the drum kit, the chorus effect may not apply.

○ RPN MSB/LSB

Status	2nd byte	3rd byte
BnH	65H	mmH
BnH	64H	llH

n=MIDI channel : 1H-3H, 9H (ch. 2, 3, 4, 10)
mm=MSB of parameter specified by RPN
ll=LSB of parameter specified by RPN

RPN
Control Changes include RPN (Registered Parameter Numbers), which are extended parameters whose function is defined in the MIDI specification.
RPN can be used to change instrument parameters.
When using RPNs, first the RPN (Controller numbers 100 and 101; they can be sent in any order) is transmitted to specify the parameter you wish to control. Then, Data Entry messages (Controller numbers 6 and 38) are used to set the value of the specified parameter. Once a RPN parameter has been specified, all further Data Entry messages on that channel are considered to apply to that specified parameter. In order to prevent accidents, when the desired setting has been made for the parameter, it is recommended that RPN be set to Null.

RPN		Data Entry		
MSB	LSB	MSB	LSB	
00H	00H	mmH	--	Pitch Bend Sensitivity mm: 00H-18H (0-24 semitones) Up to 2 octaves, default settings 12 semitones. This setting becomes effective for subsequent Pitch Bend messages.
00H	01H	mmH	llH	Master Fine Tuning mm, ll: 00H, 00H-40H, 00H-7FH, 7FH (-8192 x 100/8192 - 0 - +8192 x 100/8192 cent)
00H	02H	mmH	--	Coarse Tuning mm: 10H-40H-70H (-48 - 0 - +48 semitones)
7FH	7FH	--	--	RPN reset No specified parameter is assigned to RPN and NRPN. Current value is not affected.

● Program Change

Status	2nd byte
CnH	ppH

n=MIDI channel : 1H-3H, 9H (ch. 2, 3, 4, 10)
pp=Program number : 00H-7FH (prog.1-prog.128)

- The first Note On after receiving a Program change sounds a voice with a new tone with exception of the voices which have been sounded before the Program change is received.

● Pitch Bend Change

Status	2nd byte	3rd byte
EnH	llH	mmH

n=MIDI channel : 1H-3H, 9H (ch. 2, 3, 4, 10)
mm, ll=Pitch bend value : 00H, 00H-40H, 40H-7FH, 7FH (-8192 - 0 - +8191)

■ Channel Mode Message

● All Sound Off

Status	2nd byte	3rd byte
BnH	78H	00H

n=MIDI channel : 1H-3H, 9H (ch. 2, 3, 4, 10)

- All current active voice in the specified channel will be shut off.

● Reset All Controllers

Status	2nd byte	3rd byte
BnH	79H	00H

n=MIDI channel : 1H-3H, 9H (ch. 2, 3, 4, 10)

- The following control values on the specified channel return to the default value.

Controller	Default Value
Modulation	0 (min)
Volume	123 (max)
Panpot	64 (center)
Expression	127 (max)
Hold1	0 (off)
RPN/NRPN	No specified parameter / No change in value
Pitch Bend Change	0

● All Note Off

Status	2nd byte	3rd byte
BnH	7BH	00H

n=MIDI channel : 1H-3H, 9H (ch. 2, 3, 4, 10)

- All active voices on the specified channel are turned off. (Each voice responds as to a Note Off.) If Hold1 is ON, this message does not become effective until Hold is OFF.
  Drum track ignores this message.

■ System Exclusive Message

Status	Data byte	Status
F0H	iiH, ddH, ..., eeH	F7H

F0H : System Exclusive
ii=ID number : 41=Roland
7E=Universal Non-Realtime Message
dd, ..., ee=Data: 00H-7FH (0-127)
F7H : EOX (End Of Exclusive)

- With the JS-5, the System Exclusive Messages can be used to transmit Bulk Dump of Song/Style data and System data. For details refer to p. 134.

■ System Common Message

Recognized only when the JS-5 is in stop and MIDI Sync mode is set at MIDI.

● Song Position Pointer

Status	2nd byte	3rd byte
F2H	llH	mmH

mm, ll =Value : 00H, 00H-7F, 7FH (0-16383)

- If the JS-5 receive Song Position Pointer, it calls the position in the song.

● Song select

Status	2nd byte
F3H	ssH

ss=Song number : 00H-63H (0-99)

* If a Preset Song is selected on the JS-5, this message switches Preset Songs. If a User Song is selected, it switches User Songs. This message cannot switch between Preset and User Songs.

■ System Realtime Message

● Timing Clock

Status
F8H

* This message is ignored when the MIDI Sync mode is set at INT or REMOTE.

● Start

Status
FAH

* This message is ignored when the MIDI Sync mode is set at INT.

● Continue

Status
FBH

* This message is ignored when the MIDI Sync mode is set at INT.

● Stop

Status
FCH

* This message is ignored when the MIDI Sync mode is set at INT.

● Active Sensing

Status
FEH

* Whenever the JS-5 receives this message, it monitors the interval of the incoming data. If the subsequent message has not arrived within about 420 ms after the previous data, it processes all tracks as though it has received All Sound Off, All Notes Off, Reset All Controllers, and mutes the sounding voices, then stops monitoring receiving interval.

3. Messages stored during Realtime recording of styles

■ Channel Voice Message

● Note Off

Status	2nd byte	3rd byte
9nH	kkH	00H

n=MIDI channel : 1H-3H, 9H (ch. 2, 3, 4, 10)
kk=Note number : 00H-7FH (0-127)

● Note on

Status	2nd byte	3rd byte
9nH	kkH	vvH

n=MIDI channel : 1H-3H, 9H (ch. 2, 3, 4, 10)
kk=Note number : 00H-7FH (0-127)
vv=Velocity : 01H-7FH (1-127)

4. Exclusive Communications

■ General

JS-5 can do one-way communications to send and receive parameters for kits, system setup, sequence, user chord.
Model ID included in the exclusive message should be 00H 35H. The device ID code should be System Exclusive Device ID of MIDI parameter. Note that the actual value that set in device ID field is smaller by one than the value set System Exclusive Device ID of MIDI parameter.

● Universal Non-Realtime System Exclusive Message

○ Inquiry Request

Status	data byte	Status
F0H	7EH, dev, 06H, 01H	F7H

Byte	Description
F0H	Exclusive Status
7EH	ID Number (Universal Non-Realtime Message)
dev	Device ID (dev: 10H(17)-1FH(32))
06H	Sub ID#1 (General Information)
01H	Sub ID#2 (Inquiry Request)
F7H	EOX (End of Exclusive)

* The dev is own device number or 7FH (Broadcast).
* When Inquiry Request is received, Inquiry Reply message will be transmitted.

○ Inquiry Reply

Status	Data byte	Status
F0H	7EH, dev, 06H, 02H, 41H, 01H, 13H, 00H, 00H, 00H, 03H, 00H, 00H	F7H

Byte	Description
F0H	Exclusive Status
7EH	ID Number (Universal Non-Realtime Message)
dev	Device ID (dev: 10H(17)-1FH(32))
06H	Sub ID#1 (General Information)
02H	Sub ID#2 (Inquiry Reply)
41H	Manufacturer ID (Roland)
01H, 13H	Device Family Code
00H, 00H	Device Family Number Code
00H, 03H, 00H, 00H	Software Revision Level
F7H	EOX (End of Exclusive)

* Reply the message by the unique device ID (dev) when the device has received the Inquiry Request Message in the Broadcast.

● Data Transmission

○ Request data RQ1 11H

Byte	Description
F0H	Exclusive status
41H	manufacturer ID (Roland)
DEV	device ID (00H-0FH)
00H	model ID (JS-5) MSB
35H	model ID (JS-5) LSB
11H	command ID (RQ1)
aaH	address MSB
aaH	address
aaH	address
aaH	address LSB
ssH	size MSB
ssH	size
ssH	size
ssH	size LSB
sum	checksum
F7H	EOX (End of Exclusive)

○ **Data set** **DT1 12H**

Byte	Description
F0H	Exclusive status
41H	manufacturer ID (Roland)
DEV	device ID (00H-0FH)
00H	model ID (JS-5) MSB
35H	model ID (JS-5) LSB
12H	command ID (DT1)
aaH	address MSB
aaH	address
aaH	address
aaH	address LSB
ddH	address MSB
:	
ddH	data LSB
sum	checksum
F7H	EOX (End of Exclusive)

■ Transmission

The JS-5 transmits Exclusive message only when MIDI Bulk dump is performed by panel operation.

■ Receive

The JS-5 receives Exclusive message only when MIDI Bulk dump is not performed and it is in stop.

5. Parameter Address Map

Address are shown in every 7-bit hexadecimal.

Address	MSB			LSB
Binary 7 bit hex.	0aaa aaaa AA	0bbb bbbb BB	0ccc cccc CC	0ddd dddd DD

■ Parameter bass address

Start

Address	Description
00 00 00 00	system setup parameters
00 00 00 00	user song data
00 00 00 00	user style data

1. System setup parameters

Data included in this area is all MIDI/utility data.
If you want to send Data Request to the JS-5 in this area, set the address and the size as follows.
Address : 00 00 00 00
size : 00 00 00 00
The JS-5 ignores the Data request which designate different address or size.
No data in this area can be transferred in unit of one byte.

2. User song data

Data included in this area are all user songs.
If you want to send Data Request to the JS-5 in this area, set the address and the size as follows.
Address : 00 00 00 00
size : 00 00 00 00
The JS-5 ignores the Data request which designate different address or size.
No data in this area can be transferred in unit of one byte.

3. User style data

Data included in this area are all user style.
If you want to send Data Request to the JS-5 in this area, set the address and the size as follows.
Address : 00 00 00 00
size : 00 00 00 00
The JS-5 ignores the Data request which designate different address or size.
No data in this area can be transferred in unit of one byte.

6. Supplementary material

● Decimal/Hexadecimal table

(hexadecimal values are indicated by a following H)
MIDI uses 7-bit hexadecimal values to indicate data values and the address and size of exclusive messages. The following table shows the correspondence between decimal and hexadecimal numbers.

D	H	D	H	D	H	D	H
0	00H	32	20H	64	40H	96	60H
1	01H	33	21H	65	41H	97	61H
2	02H	34	22H	66	42H	98	62H
3	03H	35	23H	67	43H	99	63H
4	04H	36	24H	68	44H	100	64H
5	05H	37	25H	69	45H	101	65H
6	06H	38	26H	70	46H	102	66H
7	07H	39	27H	71	47H	103	67H
8	08H	40	28H	72	48H	104	68H
9	09H	41	29H	73	49H	105	69H
10	0AH	42	2AH	74	4AH	106	6AH
11	0BH	43	2BH	75	4BH	107	6BH
12	0CH	44	2CH	76	4CH	108	6CH
13	0DH	45	2DH	77	4DH	109	6DH
14	0EH	46	2EH	78	4EH	110	6EH
15	0FH	47	2FH	79	4FH	111	6FH
16	10H	48	30H	80	50H	112	70H
17	11H	49	31H	81	51H	113	71H
18	12H	50	32H	82	52H	114	72H
19	13H	51	33H	83	53H	115	73H
20	14H	52	34H	84	54H	116	74H
21	15H	53	35H	85	55H	117	75H
22	16H	54	36H	86	56H	118	76H
23	17H	55	37H	87	57H	119	77H
24	18H	56	38H	88	58H	120	78H
25	19H	57	39H	89	59H	121	79H
26	1AH	58	3AH	90	5AH	122	7AH
27	1BH	59	3BH	91	5BH	123	7BH
28	1CH	60	3CH	92	5CH	124	7CH
29	1DH	61	3DH	93	5DH	125	7DH
30	1EH	62	3EH	94	5EH	126	7EH
31	1FH	63	3FH	95	5FH	127	7FH

D: decimal
H: hexadecimal

- Decimal expressions such as used for MIDI channel, Bank Select, and Program Change will be the value 1 greater than the decimal value given in the above table.
- Since each MIDI byte carries 7 significant data bits, each byte can express a maximum of 128 different values. Data for which higher resolution is required must be transmitted using two or more bytes. For example a value indicated as a two-byte value of aa bbH would have a value of aa x 128 + bb.
- For a signed number (+/-), 00H = -64, 40H = +/-0, and 7FH = +63. I.e., the decimal equivalent will be 64 less than the decimal value given in the above table. For a two-byte signed number, 00 00H = -8192, 40 00H = +/-0, and 7F 7FH = +8191. For example the decimal expression of aa bbH would be aa bbH - 40 00H = (aa x 128 + bb - 64 x 128.
- Hexadecimal notation in two 4-bit units is used for data indicated as nibbled The nibbled two-byte value of 0a 0b H would be a x 16 + b.

<Example 1>
What is the decimal equivalent of 5AH?
From the above table, 5AH = 90.

<Example 2>
What is the decimal equivalent of the 7-bit hexadecimal values 12 34H?
From the above table, 12H = 18 and 34H = 52
Thus, 18 x 128 + 52 = 2356

<Example 3>
What is the decimal equivalent of the nibbled expression 0A 03 09 0DH?
From the above table, 0AH = 10, 03H = 3, 09H = 9, 0DH = 13
Thus, the result is ((10 x 16 + 3) x 16 + 9) x 16 + 13 = 41885

<Example 4>
What is the nibbled equivalent of the decimal number 1258?
16) 1258
16) 78 ...10
16) 4 ...14
0 ... 4
From the above table, 0=00H, 4=04H, 14=0EH, 10=0AH
Thus the result is 00 04 0E 0AH

○ Examples of actual MIDI messages

<Example 2> CE 49
CnH is the Program Change status and öIis the MIDI channel number. Since 9H = 9, and 49H = 73, this is a Program Change message of MIDI CH = 10, Program number 74 (in the GS sound map, Flute).

❍ Examples of exclusive messages and calculating the checksum

Roland exclusive messages (RQ1, DT1) are transmitted with a checksum at the end of the data (before F7) to check that the data was received correctly. The value of the checksum is determined by the address and data (or size) of the exclusive message.

❍ How to calculate the checksum (hexadecimal values are indicated by a

The checksum consists of a value whose lower 7 bits are 0 when the address, size and checksum itself are added.
The following formula shows how to calculate the checksum when the exclusive message to be transmitted has an address of aa bb cc ddH, and data or size of ee ffH.

aa + bb + cc + dd + ee + ff = total
total / 128 = quotient ... remainder
128 - remainder = checksum

Checksum is 0 if the remainder is 0.

<Example> Request to transfer the kit parameter
See the Parameter Address Map address : 00 00 00 00H
size : 30 00 00 00H

F0	41	11	00 13	11	00 00 00 00	30 00 00 00	??	F7
(1)	(2)	(3)	(4)	(5)	address	size	checksum	(6)

(1) Exclusive status
(2) ID number (Roland)
(3) device ID(17)
(4) model ID (JS-5)
(5) command ID RQ1)
(6) End of Exclusive

Next we calculate the checksum.
00H + 00H + 00H + 00H + 30H + 00H +00H + 00H = 0 + 0 + 0 + 0 + 48 + 0 + 0 + 0 = 48 (sum)
48 (total) 128 (quotient) = 0 (quotient) ... 48 (remainder)
checksum = 128 - 48 (quotient) =80 = 50H

This means that the message transmitted will be F0 41 11 00 13 11 00 00 00 00 30 00 00 00 50 F7.

JamStation
Model JS-5

MIDI Implementation Chart

Date : Apr. 5, 2000
Version : 1.00

Function...		Transmitted	Recognized	Remarks
Basic Channel	Default	2, 3, 4, 10	2, 3, 4, 10	
	Changed	X	X	
Mode	Default	Mode 3	Mode 3	
	Messages	X	Mode 3, 4 (M = 1)	
	Altered	**********		
Note Number :	True Voice	0–127	0–127	
		**********	0–127	
Velocity	Note On	O	O	
	Note Off	O	O	
After Touch	Key's	X	X	
	Channel's	X	X	
Pitch Bend		X	O	Resolution : 9 bit
Control Change	1	X	O	Modulation
	6, 38	X	O	Data entry
	7	X	O *4	Volume
	10	X	O	Panpot
	11	X	O	Expression
	64	X	O	Hold 1
	91	X	O	Effect 1 (Reverb Send Level)
	94	X	O	Effect 3 (Chorus Send Level)
	100, 101	X	O	RPN MSB, LSB
Program Change	: True Number	X	O	
		**********	0–127	PROGRAM 1 - 128
System Exclusive		O	O	
System Common	: Song Position	O *1	O *2	
	: Song Select	O *1	O *2	
	: Tune Request	X	X	
System Real Time	: Clock	O *1	O *3	
	: Commands	O *1	O *2	
Aux Messages	: Local On/Off	X	X	
	: All Notes Off	X	O	
	: All Sound Off	X	O	
	: Reset All Controllers	X	O	
	: Active Sensing	O *1	O	
	: System Reset	X	X	
Notes		* 1 Except SYNC Mode = "EXT" * 2 Except SYNC Mode = "INT" * 3 Except SYNC Mode = "INT" or "REMOTE" * 4 The volume of the audio part can be received on channel 5.		

Mode 1 : OMNI ON, POLY
Mode 2 : OMNI ON, MONO
Mode 3 : OMNI OFF, POLY
Mode 4 : OMNI OFF, MONO

O : Yes
X : No

Specifications

JS-5: JamStation

- **Maximum Polyphony**
  32 voices
- **Instruments**
  Instruments (including Bass): 128
  Drum Kits: 16
- **Effects**
  Reverb
  Chorus
  Insert Effects (40 types)
- **Styles**
  Preset Style: 200 x 8 (Forms)
  User Style: maximum 20 x 8 (Forms) *1
  * *Form: Intro, Verse 1, Fill 1, Verse 2, Fill 2, Break 1, Break 2, ending*
- **Songs**
  Preset Songs: 200
  User Songs: maximum 100 *1 *2
  Card Songs: maximum 100 *1 *2
  Song Length: Maximum 999 measures for song *1
  * *This figure may vary depending on the size of the Styles, and the number of chords and Forms used.*
- **Resolution**
  Per quater note: 96
- **Tempo**
  Quater note: 20–260
- **Data Input Method**
  Realtime / Step
  * *User Styles are available only in Realtime Recording.*
- **Available Recording Time on Audio Track**
  Internal Memory:
  1 minute, 58 seconds (Long recording mode)
  1 minute, 35 seconds (Hi-Fi recording mode)
  Memory Card (SmartMedia):
  32 Mbytes 34 minutes, 2 seconds (Long recording mode)
  27 minutes, 14 seconds (Hi-Fi recording mode)
  64 Mbytes 68 minutes, 9 seconds (Long recording mode)
  54 minutes, 31 seconds (Hi-Fi recording mode)
  * *The above times are the total recording times for all songs. If you record for an extended time on one song, the recording time available for the other songs will decrease, and in some cases recording may not be possible.*
  * *The available recording time is the maximum recording time available in the internal memory and memory card. This figure may be smaller depending on the memory used for recording User (or Card) Songs and any data backed up to the memory card.*
- **Display**
  16 Characters x 2 Lines LCD
  3 Characters 7 Segment LED
- **Connectors**
  Recording Input Jack
  Output Jacks (L (MONO), R)
  Headphone Jack (stereo miniture phone type)
  Foot Switch Jack
  MIDI Connectors (IN, OUT)
  AC Adaptor Jack (AC 14 V)
- **Power Supply**
  AC 14 V (AC Adaptor)
- **Current Draw**
  650 mA
- **Dimensions**
  269 (W) x 176 (D) x 63 (H) mm
  10-9/16" (W) x 6-15/16" (D) x 2-1/2" (H) inches
- **Weight**
  1.1 kg / 2 lbs 7 oz (excluding AC Adaptor)
- **Accessories**
  Owner's Manual
  AC Adaptor (BRC Series)
  Roland Service (information sheet)
- **Options**
  Foot Switch: FS-5U
  Foot Switch Cable: PCS-31 (Roland)
  (1/4 inches Phone Plug (stereo) - 1/4 inches Phone Plug (mono) x 2)

*1 This may be less due to the amount of recorded user (card) songs/styles, the recording time on the audio track, and the number of backups on memory card.

*2 When a memory card is used, audio recording is possible for a maximum of 100 songs.
When the JS-5 is used by itself, audio recording is possible for a maximum of 6 songs.

NOTE

In the interest of product improvement, the specifications and/or appearance of this unit are subject to change without prior notice.

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MEMO

MEMO

For the U.K.

IMPORTANT: THE WIRES IN THIS MAINS LEAD ARE COLOURED IN ACCORDANCE WITH THE FOLLOWING CODE.

BLUE: NEUTRAL
BROWN: LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:
The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK.
The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED.
Under no circumstances must either of the above wires be connected to the earth terminal of a three pin plug.

For EU Countries

Apparatus containing Lithium batteries

CAUTION
Danger of explosion if battery is incorrectly replaced.
Replace only with the same or equivalent type recommended by the manufacturer.
Discard used batteries according to the manufacturer's instructions.

ADVARSEL!
Lithiumbatteri - Eksplosionsfare ved fejlagtig håndtering.
Udskiftning må kun ske med batteri af samme fabrikat og type.
Levér det brugte batteri tilbage til leverandøren.

VARNING
Explosionsfara vid felaktigt batteribyte.
Använd samma batterityp eller en ekvivalent typ som rekommenderas av apparattillverkaren.
Kassera använt batteri enligt fabrikantens instruktion.

ADVARSEL
Eksplosjonsfare ved feilaktig skifte av batteri.
Benytt samme batteritype eller en tilsvarende type anbefalt av apparatfabrikanten.
Brukte batterier kasseres i henhold til fabrikantens instruks joner.

VAROITUS
Paristo voi räjähtää, jos se on virheellisesti asennettu.
Vaihda paristo ainoastaan laitevalmistajan suosittelemaan tyyppiin. Hävitä käytetty paristo valmistajan ohjeiden mukaisesti.

For EU Countries

CE This product complies with the requirements of European Directive 89/336/EEC.

For the USA

FEDERAL COMMUNICATIONS COMMISSION RADIO FREQUENCY INTERFERENCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Unauthorized changes or modification to this system can void the users authority to operate this equipment.
This equipment requires shielded interface cables in order to meet FCC class B Limit.

For Canada

NOTICE
This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

AVIS
Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

BOSS Corporation

02126623 '04-1-3N

IMPORTANT: Handling the SmartMedia

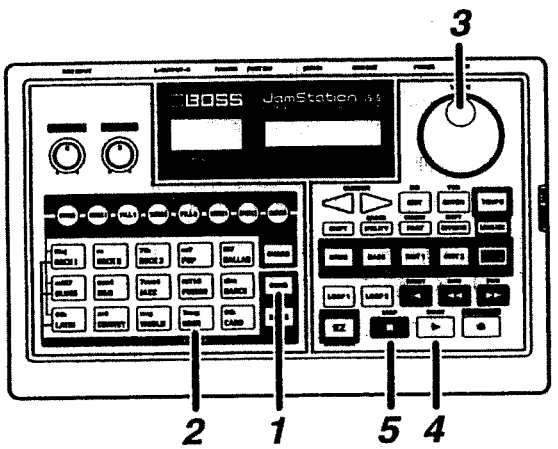
The JS-5 can use 8 to 64 MB SmartMedia with a power-source voltage of 3.3 V.

Inserting SmartMedia other than those described here may result in corruption of data in the JS-5. Be sure never to use anything other than the specified media.

** SmartMedia is a trademark of Toshiba Corporation.*

Listening to a Demo Song

When the unit is shipped from the factory, a demo song that makes full use of the features of the JS-5 is saved as the first User Song. Try selecting and listening to this demo song.



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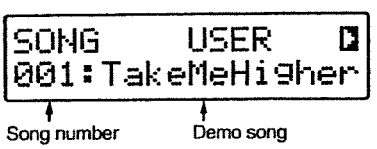
1. **Press [SONG], getting the button to light.**
   The Song screen appears.

2. **Press [USER].**

3. **Turn [VALUE] to select "001: TakeMeHigher."**



4. **Press [START].**
   The demo song starts playing.

   Song Title: You Take Me Higher
   Copyright © 2000, Roland US

5. **Press [STOP] to stop playing.**
   Press [FWD] to move to the next measure.
   Press [RWD] to go back one measure.
   Press [RESET] to go back to the beginning of the song.

* *When the performance reaches the end, it goes back to the beginning of the song automatically.*

NOTES

- When you have done Factory Reset (Owner's Manual p. 130), the existing demo song will be deleted. (You can't recover the original demo song.)
- Although you can record up to a maximum of 1 minute and 58 seconds of audio with the JS-5 in LONG mode (Owner's Manual p. 111), the recordings of guitar and vocal performances on the demo song, thus shortening the recording time available for new audio recordings.
  If you want to increase available recording time to the very maximum, either delete the entire demo song (Owner's Manual p. 81) or delete only the audio recordings (Owner's Manual p. 114).
- The demo song is saved as a User Song, allowing the data to be rewritten. You can modify the demo song, or even delete it if it's not needed, but once you do so you can't recover the original demo song. If you want to keep the demo song, we recommend copying it to a memory card (SmartMedia: optional) for safekeeping. (Owner's manual p. 82)

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ご注意：スマートメディアについて

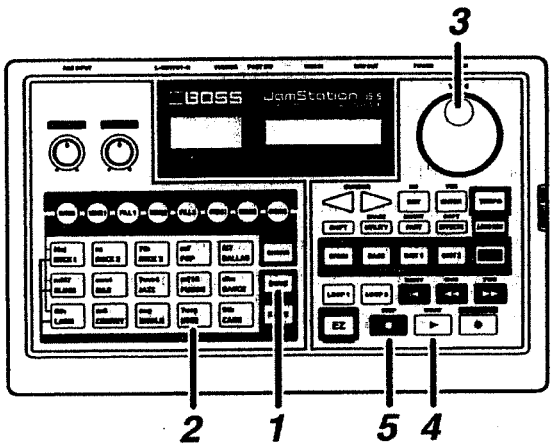
JS-5 は、電源電圧が 3.3 V、容量が 8～64 M バイトのスマートメディアに対応しています。

それ以外のスマートメディアを差し込むと、本体のデータが破壊される恐れがありますので絶対に使用しないでください。

※ スマートメディアは株式会社東芝の商標です。

デモ・ソングを聴いてみよう

工場出荷時には、JS-5 の特長を活かしたデモ・ソングがユーザー・ソングの 1 番として保存されています。
このデモ・ソングを選んで聴いてみましょう。



※ デモ・ソングを個人で楽しむ以外に権利者の許諾なく使用することは、法律で禁じられています。

1. [SONG] を押して、ボタンを点灯させます。
ソング画面が表示されます。

2. [USER] を押します。

3. [VALUE] を回して、"001：TakeMeHigher" を選びます。

4. [START] を押します。
デモ・ソングの演奏が始まります。

曲名： **You Take Me Higher**
Copyright © 2000, Roland US

5. [STOP] を押すと、演奏が止まります。
[FWD] を押すと、次の小節に移ります。
[RWD] を押すと、1つ前の小節に戻ります。
[RESET] を押すと、ソングの先頭に戻ります。

※ 最後まで演奏すると、自動的にソングの先頭に戻ります。

ご注意

- ファクトリー・リセット（取扱説明書 P.130）を行うと、デモ・ソングは削除されます。（復活させることはできません。）
- 本体には、LONG（長時間録音）モードで最大 1 分 58 秒のオーディオ録音（取扱説明書 P.111）が可能ですが、デモ・ソングでギター演奏とボーカルを録音しているため、他の曲でオーディオ録音する場合、録音可能な時間が少なくなります。
  録音可能時間を最大限に長くしたいときは、デモ・ソング全部を削除（取扱説明書 P.81）するか、オーディオ録音のみを消去（取扱説明書 P.114）してください。
- デモ・ソングは、データの書き換えが可能なユーザー・ソングに保存されています。デモ・ソングに対して変更操作をしたり、デモ・ソングを削除することができますが、**元のデモ・ソングを復活させることはできません。**
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